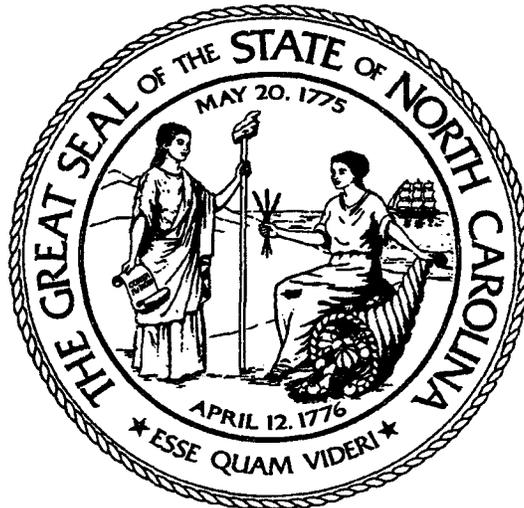


**LEGISLATIVE
RESEARCH COMMISSION**

**ENERGY CONSERVATION AND
USE OF RENEWABLE ENERGY SOURCES**



**REPORT TO THE
1995 GENERAL ASSEMBLY
OF NORTH CAROLINA**

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STATE OF NORTH CAROLINA
LEGISLATIVE RESEARCH COMMISSION
STATE LEGISLATIVE BUILDING
RALEIGH 27611



January 11, 1995

TO THE MEMBERS OF THE 1995 GENERAL ASSEMBLY:

The Legislative Research Commission herewith submits to you for your consideration its final report on Energy Conservation and Use of Renewable Energy Sources. The report was prepared by the Legislative Research Commission's Committee on Energy Conservation and Use of Renewable Energy Sources pursuant to G.S. 120-30.17(1).

Respectfully submitted,


Daniel T. Blue, Jr.
Speaker of the House


Marc Basnight
President Pro Tempore

Cochairmen
Legislative Research Commission





1993-1994

LEGISLATIVE RESEARCH COMMISSION

MEMBERSHIP

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the Senate**

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PREFACE

The Legislative Research Commission, established by Article 6B of Chapter 120 of the General Statutes, is the general purpose study group in the Legislative Branch of State Government. The Commission is cochaired by the Speaker of the House and the President Pro Tempore of the Senate and has five additional members appointed from each house of the General Assembly. Among the Commission's duties is that of making or causing to be made, upon the direction of the General Assembly, "such studies of and investigations into governmental agencies and institutions and matters of public policy as will aid the General Assembly in performing its duties in the most efficient and effective manner" (G.S. 120-30.17(1)).

The Legislative Research Commission, prompted by actions during the 1993 Session, has undertaken studies of numerous subjects. These studies were grouped into broad categories and each member of the Commission was given responsibility for one category of study. The Cochairs of the Legislative Research Commission, under the authority of G.S. 120-30.10(b) and (c), appointed committees consisting of members of the General Assembly and the public to conduct the studies. Cochairs, one from each house of the General Assembly, were designated for each committee.

The study of Energy Conservation and Use of Renewable Energy Sources would have been authorized by Part II, Section 2.1 of the 2nd Edition of House Bill 1319 which passed both chambers but inadvertently was among the bills not ratified at the end of the 1993 Session.

Part II of the 2nd Edition of House Bill 1319 would allow studies authorized by that Part for the Legislative Research Commission to consider House Joint Resolutions 104 and 150 and Senate Joint Resolution 337 in determining the nature, scope, and aspects of the study. Section 1 of House Joint Resolutions 104 and 150 and Senate Joint Resolution 337 reads in part: "The Legislative Research Commission is

authorized to study ways to promote energy conservation and the use of renewable sources of energy in North Carolina. The Commission may address all issues that bear on energy conservation in this State." The relevant portions of the 2nd Edition of House Bill 1319 and House Joint Resolutions 104 and 150 and Senate Joint Resolution 337 are included in Appendix A. The Legislative Research Commission authorized this study in the Fall of 1993 under authority of G.S. 120-30.17(1) and grouped this study in its Environment area under the direction of Senator Lura S.Tally. (House Bill 1319 was later amended and ratified in 1994 with the Legislative Research Commission studies 2nd Edition language deleted because the Legislative Research Commission had already acted on these matters).

The Committee was chaired by Senator C. R. Edwards and Representative J. Fred Bowman. The full membership of the Committee is listed in Appendix B of this report. A Committee notebook containing the Committee minutes and all information presented to the Committee is filed in the Legislative Library.

BACKGROUND

This Committee is a continuation of the former Legislative Research Commission Committee on Ways to Promote the Conservation of Energy and the use of Renewable Energy Sources in Residential, Commercial, Industrial, and Public Facilities. The former committee recommended six legislative proposals, one of which was a joint resolution to continue the study of energy conservation in North Carolina.

The Committee on Energy Conservation and Use of Renewable Energy Sources met eight times: January 21, 1994; April 27, 1994; September 13, 1994; October 5, 1994; November 17, 1994; December 8, 1994; and December 19, 1994, and January 3, 1995.

COMMITTEE PROCEEDINGS

January 21, 1994

The Committee reviewed actions on the bills recommended to the 1993 General Assembly by the Legislative Research Commission study committee authorized in 1991 to study Ways to Promote the Conservation of Energy and the Use of Renewable Energy Sources in Residential, Commercial, Industrial, and Public Facilities. The bills that were enacted are:

House Bill 101, entitled An Act to Expand the Current Energy Policy for State Government to Apply to the Construction, Operation, and Renovation of State Facilities and to the Purchase, Operation, and Maintenance of Equipment for such Facilities. This bill was enacted as Chapter 33 of the 1993 Session Laws.

House Bill 102, entitled An Act to Require the Local Boards of Education to use the Energy Guidelines for School Design and Construction and to Require Energy Use Goals and Standards in order to Assure the Construction of Energy Efficient New Schools and School Renovations. This bill was enacted as Chapter 465 of the 1993 Session Laws.

House Joint Resolution 104, entitled A Joint Resolution Authorizing the Legislative Research Commission to Continue to Study the Ways to Promote Energy Conservation in Buildings in North Carolina, and House Joint Resolution 150 and Senate Joint Resolution 337, entitled A Joint Resolution authorizing the Legislative Research Commission to Continue to Study Ways to Promote Energy Conservation and the use of Renewable Energy Sources in North Carolina. These resolutions authorize this study.

The Committee then reviewed those bills that were not enacted but that are eligible for consideration by the 1993 General Assembly (1994 Regular Session). These bills are:

Senate Bill 91 and its companion House Bill 99, entitled An Act to Provide that, under the Temporary Budget Flexibility Extended to Certain Institutions in the University of North Carolina System, a Designated Portion of Any Retained Reversions May be Used for Energy Conservation.

Senate Bill 94 and its companion House Bill 100, entitled An Act to Authorize Units of Local Government, Local School Boards, and Community Colleges to Enter Into Guaranteed Energy Savings Contracts in Order to Finance Energy Conservation Measures in Local Public Facilities.

Senate Bill 95 and its companion House Bill 103, entitled An Act to Establish the State Facilities Energy Conservation Program; to Authorize the Department of Administration to Enter Into Alternative Financing Agreements for the Purchase of

Energy Conservation Projects; and to Authorize the Issuance of Bonds that are Secured by an Interest in the Property Purchased.

Steve Levitas, Deputy Secretary, Department of Environment, Health, and Natural Resources conveyed the Governor's support for the entire package of energy bills recommended by the former committee on energy conservation. These bills will help secure for the State both a healthy environment and a sound economy, without having to make a choice between the two.

An overview of the role of the Energy Division with respect to State buildings and public schools was presented by Tim Butler, Chief, Conservation Section, Energy Division, Department of Commerce. The mission of the Energy Division is to develop energy policies, make energy forecasts, conduct energy planning, and develop energy conservation programs. Mr. Butler mentioned several energy conservation programs with which the Division has been involved. These include: a grants program for hospitals and schools, the school bus routing program, and the traffic signal lights program. Mr. Butler recommended that this Committee consider the following issues during its tenure: alternative transportation fuels and how to address the goals under the federal Clean Air Act Amendments of 1990, Pub. L., No. 101-549, 104 Stat. 2399, and the Energy Policy Act of 1992, 42 U.S.C. § 13201, et seq.

Speros Fleggas, Director, Office of State Construction, Department of Administration, stated that as of January, 1994, the Office of State Construction had some 631 projects in various stages of design valued at \$973,483,409. There are 223 active projects valued at \$417,680,885. The coordination and management responsibility for implementation of the State's capital improvement program rests with the Office of State Construction. It is also responsible for oversight of the design and construction of all State buildings for all State agencies, the university system, and the community college system. Energy conservation is an important part of the guidelines and policies of the North Carolina Construction Manual, published by the Office of

State Construction. In 1975, the General Assembly established an energy policy for State agencies concerning major construction or renovation of buildings, which requires an analysis of the cost of energy consumption of each facility constructed or renovated. Various energy design concepts such as passive solar energy are also considered.

Marshall Mauney, Architect, Division of School Facility Services, Department of Public Instruction, discussed the Energy Guidelines for School Design and Construction. The purpose of these guidelines is to help create better, more productive learning environments for children and teachers, reduce energy and maintenance costs over the long term life of schools, and reduce adverse impacts on the natural environment. Key elements of the Energy Guidelines for School Design and Construction are: a comprehensive process from planning through occupancy; energy design as an integral part of the architectural design; substantial energy savings, beyond the energy efficiency standards required under the State Building Code; design teams that provide comprehensive services; a reasonable construction budget and schedule; a life cycle cost approach to budgeting; and understanding how a facility's environment has an impact on teacher and student productivity.

Tim Butler of the Energy Division summarized Senate Bill 95, the State Energy Conservation Program. The Energy Division estimates that utility costs could be reduced by as much as \$34 million annually through the installation of cost-effective capital improvements of existing State buildings. This represents a rate of return of over 30% on such an investment. Examples of such energy conservation projects include the installation of: variable air volume fan systems; high efficiency boiler replacements and controls; heat recovery units; lighting and ballast replacements; solar and other renewable energy technologies; and technologies designed to reduce electrical demand. The ratification of Senate Bill 95 would provide much of the needed capital to implement these cost-effective efficiency measures without the use of tax-derived revenues.

John Runkle of the North Carolina Solar Energy Association urged the Committee to endorse two other energy related bills: Senate Bill 1045, Solar Tax Credit and House Bill 1318, Funding for NC Solar Center.

April 27, 1994

The Committee devoted this meeting to a thorough review of those bills recommended by the former Legislative Research Commission Committee on Ways to Promote the Conservation Energy and Use of Renewable Energy Sources in Residential, Commercial, Industrial, and Public Facilities that were not enacted by the 1993 General Assembly, but that are still eligible for consideration by the 1993 General Assembly (1994 Regular Session) when it convenes this summer. Senator Clark Plexico gave a brief explanation of Senate Bill 95, State Energy Conservation Program. Senate Bill 95 was the centerpiece of the former energy conservation committee's recommendations, because it provided for financing for the rest of that committee's energy legislation. Senate Bill 95 authorizes the Department of Administration to finance the cost of energy conservation projects by establishing a procedure whereby special indebtedness through alternative financing agreements or through bonded indebtedness can be incurred. Such special indebtedness creates a security interest in all or part of the energy conservation project financed by the special indebtedness. An energy conservation project is defined to include any modification, rehabilitation, renovation, or improvement of existing State facilities or any acquisition and installation of fixtures or equipment in existing State facilities that is intended to reduce energy costs or consumption or allow the use of an alternative energy source. The use of special indebtedness to finance an energy conservation project must be approved by the State Treasurer after consulting with the Office of State Budget and Management. The use of special indebtedness to finance an energy conservation project must be approved by

the Council of State, which may specify terms, conditions, and restrictions as it deems necessary or desirable. The total amount of special indebtedness may not exceed \$30,000,000 at any one time. No deficiency judgement may be rendered against the State, and the taxing power of the State shall not be pledged directly or indirectly to secure any moneys due under an alternative financing agreement or issue of bonded indebtedness. Senate Bill 95 also enacts Part 2 of Article 3B of Chapter 143 under which the Energy Division selects facilities on which to perform technical analyses for the purpose of identifying potential energy conservation measures. Then the Energy Division determines, with the assistance of the Department of Administration, which energy conservation projects to undertake. Only projects that, according to the technical analysis, will have a payback of no more than six years may be considered for final selection, with those having no more than a two year pay back having priority. The Energy Division is required to notify the Joint Legislative Commission on Governmental Operations of any project having a construction cost greater than \$5,000 before executing the financing documents. State government spends about \$111 million a year on lighting, heating and cooling bills in State buildings. If enacted, Senate Bill 95 could result in a reduction of future utilities cost of the State by as much as \$34,000,000 annually.

Doug Culbreth, Director of the Energy Division, stated that Senate Bill 95 provides a financing mechanism for existing buildings in State government. Senate Bill 14, enacted by the 1993 General Assembly as Chapter 542, contains a provision that authorizes the issuance of bonds for the construction of buildings. New buildings built with bond funds are required to undertake certain energy conservation measures. He believes that North Carolina needs to take a leadership role in energy conservation. It is important to maintain and operate our existing buildings in an efficient manner. Senate Bill 95 is a fiscal bill first and an energy bill second. There is good documentation for the potential of energy savings in State buildings. All the various

agencies in State government involved have worked on this bill. Another large bureaucracy will not have to be formed, it will expand upon existing programs. The energy savings is substantial. Thirty-four million is a conservative estimate, and is not padded by overhead costs. No appropriation of State funds is required.

Robert L. Powell, Deputy State Budget Officer, Office of State Budget and Management, stated that his office has been working with the Energy Division, the State Treasurer's Office, and the Department of Administration over a year to come up with a bill that would accomplish the purposes that Mr. Culbreth had outlined, and at the same time ensure that the credit rating of the State was protected and that the necessary funding to retire any debt that might be issued under this bill would be properly secured. He stated that the Office of Budget and Management is very satisfied with the approval process.

Robert M. High, Director, State and Local Government Finance, Department of the State Treasurer, stated that key to the financing provisions of Senate Bill 95 are the procedures to be gone through before the financing is finalized. Senate Bill 95 requires an engineering study, which is in effect a feasibility study, to be undertaken. The agency requesting the project then approaches the Treasurer's Office to go over the specifics and details in the study with the Department of Administration. At that point, it is brought before the Council of State for preliminary approval or final approval.

Speros Fleggas, Director, Office of State Construction, Department of Administration, stated that his office certainly supports the passage of Senate Bill 95.

A discussion ensued on Senate Bill 1045, Photovoltaic Equipment Tax Credit. This bill was not initiated by the former energy conservation committee but is before this committee because it is a pending energy related matter. This bill adds photovoltaic equipment (solar electric cells) to the solar technologies eligible for State income tax credits. It also raises the personal income tax credit for all solar equipment from 25% to 40% with the maximum credit possible, increasing from \$1,000 to

\$1,500. It raises the credit against corporate income tax for the installation of solar energy equipment from 20% to 35%, and increases the maximum tax credit to \$25,000. These changes to the current tax incentives will provide an incentive to a company considering a long term investment.

The Committee reviewed Senate Bill 94, Local Energy Savings Contracts, which was recommended by the former energy conservation committee and is eligible for consideration by the 1993 General Assembly (1994 Regular Session) this summer. Senate Bill 94 authorizes any local government unit, including community college boards and other boards of education, to enter into a guaranteed energy savings contract financed by installment or lease purchase with a qualified provider if the term of the contract does not exceed 10 years. The provider will post a bond to pay any excess costs. This provides the guarantee. The provider guarantees that the energy saving results will equal or exceed the total contract cost. Prior to entering into a contract, the local government unit must issue a request for proposals and solicit these by mail directly from qualified providers. The contract must stipulate that it does not constitute a liability or debt of the governmental unit or a pledge of its faith and credit.

James B. Blackburn, General Counsel, NC Association of County Commissioners, stated that Senate Bill 94 offers counties flexibility and long term savings potential.

Gene Causby, Executive Director, NC School Boards Association, stated that energy costs constitute a major part of a school system's budget and historically the State provided a large part of the energy costs in its appropriations to school systems. The State found it necessary to phase out its contributions to local school systems, and currently the entire costs are borne by local governments. The School Boards Association believes that this bill would offer a responsible option to local government in meeting this responsibility, and they support its passage.

Andrew L. Romanet, General Counsel of the North Carolina League of Municipalities, and Doug Culbreth, Director, Energy Division, Department of Commerce, offered support for the enactment of Senate Bill 94.

Jack Connell, of Honeywell, Incorporated of Raleigh, said that Honeywell has some \$700 million in performance contracts. An energy savings contract is a type of performance contract. Local governments and school systems in North Carolina spend millions of dollars each year for energy that is wasted in buildings without adequate conservation, but most local governments lack the up-front cash to pay for design and installation of available energy improvements. Senate Bill 94 would allow cities, counties, school boards, and community colleges to have the private sector advance the up-front money and to repay the advance after the measures are installed with the energy savings that result. Eighteen states including South Carolina, Tennessee, and Virginia, already have similar arrangements.

Jeff Crenshaw, Johnson Controls, Inc., is also a performance contract provider. Every kilowatt hour of lighting electricity not used prevents emissions of 1.5 pounds of carbon dioxide, 5.8 grams of sulfur dioxide, and 2.5 grams of nitrogen oxides. Lighting accounts for 20-25% of all electricity sold in the U.S. Lighting for industry, stores, offices, and warehouses represents 80-90% of total lighting electricity use. The use of energy efficient lighting has a direct effect on pollution prevention. If energy efficient lighting were used where profitable, the nation's demand for electricity would be cut by more than ten percent. This would result in annual reductions of 202 million metric tons of carbon dioxide.

The last energy conservation committee bill eligible for consideration by the General Assembly this summer is Senate Bill 91, UNC Budget Flexibility for Energy, which provides that "under temporary budget flexibility extended to certain institutions in the university system, a designated portion of any retained reversions may be used for energy conservation improvements." Senate Bill 91 allows an eligible constituent

institution to (1) carry forward an amount not to exceed 2.5% of the General Fund appropriations of which .25% may be used for energy conservation or (2) carry forward 3% if 0.5% is used for energy conservation. No project will be undertaken pursuant to this proposed legislation unless an engineering study states that the recoupment of construction cost will be in an aggregate of five years or less.

Representative Brawley moved that the committee report to the 1993 General Assembly (1994 Regular Session) that the committee supports the recommendations reviewed today. The Committee voted to submit a one page interim report in the form of a letter to the 1993 General Assembly (1994 Regular Session).

September 13, 1994

This was the first committee meeting after the 1994 summer legislative session of the 1993 General Assembly. Staff Counsel Susan Iddings presented a summary of legislation enacted during the 1994 Regular Session, which included Senate Bill 94, Local Energy Savings Contracts, and Senate Bill 1045, Photovoltaic Equipment Tax Credit. She stated that Senate Bill 95, State Energy Conservation Program, and Senate Bill 91, UNC Budget Flexibility for Energy, were not enacted. The Committee then turned its attention to the use of alternative fuels for motor vehicles. The Committee heard testimony from four out-of-state speakers. The National Institute for State Legislatures assisted in arranging for these speakers and financed their expenses through a U. S. Environmental Protection Agency technical assistance grant.

Bryan Manning, Mechanical Engineer, National Vehicle and Fuel Emissions Laboratory, US Environmental Protection Agency from Ann Arbor, Michigan, reviewed the Clean Alternative Fuel Provisions of the Clean Air Act Amendments of 1990, Pub. L. No. 101-549, 104 Stat. 2399 (CAAA). Because North Carolina presently has no nonattainment areas with respect to ozone or carbon monoxide, none of the purchase

requirements of CAAA apply to North Carolina. Over one-third of the U.S. population breathes unhealthy air contaminated with pollutants such as smog, carbon monoxide, and other air toxics. Cars, buses, and trucks are responsible for over one-half of the emissions. In order to address the pollution problem, Congress included a clean fuel fleets program in CAAA. Covered fleets would be fleets comprised of ten or more covered vehicles which are centrally fueled or capable of being centrally fueled. The program is to be implemented through a clean fuel vehicle purchase requirement for affected fleets. Reformulated gas and clean diesel fuel technology will be used for many of these vehicles. Several states plan on adopting the stricter standards of the California Low Emitting Vehicle program. A reformulated gasoline program is required in the nine worst ozone nonattainment areas in the U.S. with populations over 250,000 as of 1980. Converting a vehicle to alternative fuel does not assure that the vehicle will operate with lower emissions than those of the original vehicle. Unless converted vehicles are tested for emissions, it is not possible for states to claim emission benefits from these converted vehicles.

Charles L. Feltus, Technology Marketing, United States Department of Energy, Atlanta Support Office, Atlanta, Georgia, summarized the Energy Policy Act of 1992, 42 U.S.C. § 13201, et seq. (EPACT) and its provisions regarding the use of alternative fuels. EPACT is intended to reduce our dependence on imported oil by encouraging the use of domestic fuels. Alternative fuels include biological-derived fuels; coal-derived fuels; electricity; hydrogen; ethanol; methanol; natural gas; propane; and alcohol mixtures that consist of at least 70% alcohol. Under EPACT, federal fleets are required to purchase 5,000 alternative fuel vehicles (AFV'S) during the 1993 fiscal year. The purchase requirements for states apply only to the purchase of new light-duty vehicles in fleets with 20 or more vehicles that are operated in metropolitan areas with a 1980 population in excess of 250,000. By 1996, 10% of a state's new

fleet purchases must be AFV'S. By 1999, 20% of local government and private new fleet purchases must be AFV'S.

Gilbert W. "Burt" Cox, Mobile Source Planning Supervisor, Air Resources Division, New Hampshire Department of Environmental Services, described the New Hampshire Fleets Programs.

Jackie Cummins, Policy Associate, National Conference of State Legislatures, Denver, Colorado, presented state policy options and actions for alternative fuels.

The Committee reviewed information regarding the Energy, Environment, Economic Management Information System (EEMIS), a computerized model to evaluate the impact of energy efficiency projects on energy consumption, environmental emissions, and economic development. Economics and jobs are the driving force of the development of this model; not energy. The Southern States Energy Board, of which North Carolina is a member, is in the process of developing this system.

A Summary of the Alternative Fuels Study, a joint study by Motor Fleet Management of the Department of Administration and the Energy Division of the Department of Commerce, summarized information about the potential use of alternative fuels for State owned vehicles. Motor Fleet Management has about 1,700 light-weight vehicles that may serve as candidates for alternative fuel use. Jeff Tsai, Research Associate, Institute for Transportation Research and Education, North Carolina State University, who worked on the study, compared and contrasted various alternative fuels. In order to study the feasibility of the State using AFV's, it is necessary to examine how these vehicles are being used. AFV's have a relatively short driving range and problems with refueling due to an insufficient alternative fuel infrastructure. Dedicated vehicles, that is, vehicles driven on trips of less than 100 miles 80% or more of the time, are not hindered by these limitations. One-third of the State fleet consists of dedicated vehicles according to estimates furnished to the Committee. EPACT will require approximately 46 AFV's for the State motor fleet by

1996; 79 by 1997; and 344 by the year 2000. The Department of Transportation will have to purchase approximately 170 AFV's by the year 2000. The potential location of an alternative fuel refueling infrastructure must also be considered in order to meet the accompanying demand for AFV's. Nine staging locations had the greatest numbers of State vehicles: Raleigh, Charlotte, Chapel Hill, Asheville, Greenville, Winston-Salem, Fayetteville, Greensboro, and Wilmington. There is no clear consensus as to which is the best alternative fuel.

October 5, 1994

The Committee reviewed several important points made at the prior meeting. The purpose of the Clean Air Act Amendments in 1990 (CAAA) is to improve air quality; the purpose of the Energy Policy Act (EPACT) is to decrease U.S. dependence on foreign oil. The impetus to use alternative fuels in North Carolina stems from the mandates in EPACT, which require the phasing in of alternative vehicles in public and private fleets beginning in 1996 and ending in the year 2006. The definition of "fleet" in EPACT is critical to understanding the State's duties under EPACT. Fleet is defined, under EPACT, as a group of 20 or more light duty motor vehicles (equal or less than 8,500 lbs. gross wt.) that are primarily used in areas with a population of 250,000 or more as of 1980; that are centrally fueled or capable of being centrally fueled; and that are owned or controlled by a government entity or person having at least 50 such vehicles nationwide.

Lee Hauser, Deputy Commissioner, Department of Insurance, gave a status report on the energy standards under the State Building Code and the sufficiency of these standards under EPACT. A special ad hoc Energy Committee appointed by Code Council Chairman Sam Snowdon in 1991 developed revisions to the residential building energy requirements in the State Building Code. The ad hoc energy committee thinks

those standards meet or exceed the requirements of the Model Energy Code under EPACT; however, the United States Department of Energy does not agree. A comparison report conducted by Pacific Northwest Laboratory concludes that our energy standards in the State Building Code are "marginally less stringent" than those required under EPACT. A comparison of the two documents is currently being conducted and revision to our energy standards will be made if needed. Mr. Hauser will report to the U.S. Department of Energy before the October 24, 1994 reporting date and request an extension of certification dates for residential and commercial codes as permitted by Section C of EPACT. He expects that the draft of the revised energy standards will be considered by the Building Code Council at its March 1995 meeting.

Enforcement of the State Building Code is under the jurisdiction of city and county code enforcement officials. The primary reason the ad hoc Energy Committee has not finished its draft is the concern they have for local officials' ability to understand the technical requirements of the energy section of the Code. Due to this concern, attempts are being made to develop a prescriptive method of gaining compliance for residential and small commercial structures. Additional training of code enforcement officials would improve enforcement of the energy standards in one and two family dwellings, small multi-family dwellings, and small commercial structures.

D. George Lipford, Southeast Sales Coordinator, Propane Marketing, Conoco Inc., Research Triangle Park, addressed the use of propane gas as an alternative fuel. Propane was first used as a motor fuel in the 1920's. There are currently 3.8 million vehicles operating worldwide on propane, and one-half million of those are in the United States. It ranks third in total motor fuel sales, following only gas and diesel fuel. Currently, there are 10,000 fueling locations. Because propane is clean burning, oil changes are needed less often and spark plugs last longer, thereby reducing maintenance costs. Propane costs 30% less than conventional gasoline and yields only slightly lower mileage. Propane set a world speed record for alternative fuels in 1991.

Propane is a non-toxic fuel. A leak would pose no danger to groundwater because it vaporizes quickly. Its emission rate is below the acceptable clean air standards under CAAA; therefore, it is an extremely environmentally friendly fuel. Propane tanks are 20 times more puncture resistant than regular fuel tanks. The tanks are constructed from carbon steel under a code developed by the American Society of Mechanical Engineers. Extensive safety tests have been conducted and the storage tanks did not leak or catch on fire once during the testing. Availability of propane indicates that 3 million to 5 million vehicles could be fueled with propane by the year 2004 without affecting our domestic supply. The industry needs to upgrade the image and the number of refueling stations. There are currently only 10,000 refueling stations in existence. The small, independent businesses currently distributing propane gas have been unwilling to expend the capital necessary to improve distribution.

Greg Johnson, Supervisor, Natural Gas Vehicle Marketing and Technology Support, Piedmont Natural Gas Company, Charlotte, addressed compressed natural gas (CNG) as an alternative fuel. Vehicles and the fueling infrastructure are the source of about one-half of the annual emissions of hydrocarbons and about two-thirds of the carbon monoxide emissions. An existing vehicle converted to run on CNG can reduce emissions by as much as 80% compared to conventional vehicles. Particulates, another air quality problem in areas with large numbers of diesel trucks and buses, can be dramatically reduced by using CNG. Vehicles running on CNG are actually safer than those operating on traditional fuels. CNG is a vapor that has to be mixed with air and compressed into a smaller container. It has an octane level of 130. Vehicles dedicated to CNG use are currently manufactured. The cost to convert a vehicle to CNG or to operate as a dual fueled vehicle is approximately \$2,500 to \$3,000. CNG is not toxic or corrosive and will not contaminate groundwater. It produces no significant toxic air emission. Most fleets today operate on CNG because the fleets are centrally fueled.

CNG can be filled using the slow fill or fast fill methods. AFV's using CNG require less maintenance than standard vehicles. The United States has its own CNG supply.

Don Mitchell, Marketing, Legislative and Regulatory Affairs, EXXON Company, Houston, Texas, spoke about reformulated gasoline and petroleum distribution systems. The gasoline distribution system begins when the crude oil is discovered, taken to the refinery, refined, and loaded on tanker trucks for delivery to the local service stations. Main terminals supplying North Carolina are located in Selma, Greensboro, Charlotte, Wilmington, North Carolina, and Spartanburg, South Carolina. Environmental regulations and changing consumer demands have increased complexity and reduced flexibility in the petroleum industry. Gasoline currently includes reformulated gasoline, non-reformulated gasoline, oxygenated gasoline, gasoline with components, and gasolines with various grade ratios. Requirements for additional gasoline products will place further strain on the distribution system. Requirements may only be met through higher costs to consumers or by tradeoff with existing products. CAAA requires that all gas sold in the nine worst ozone nonattainment areas with populations over 250,000 be reformulated to reduce vehicle emissions. Reformulated gas must contain a minimum of 2% oxygen by weight and a maximum of 1% benzene by volume. The sale or dispensing of conventional gas in areas where reformulated gasoline is used is prohibited. The petroleum industry is involved with alternative fuels.

Tim S. Shaver, Manager, Electric Vehicle Program, Duke Power Company, Charlotte, discussed electric vehicles as an alternative transportation method. Electric vehicles have fewer moving parts than other vehicles, do not involve a combustion engine, and do not use fossil fuels. The main components of an electric vehicle are the electric motor, the battery that provides the motor with power, a controller to monitor current flow from the battery to the motor, and a charger to recharge the battery. The benefits of electric vehicles are: electric vehicles have lower emissions, lower fuel costs, and lower maintenance costs. Electric vehicles are available in the

long term from original equipment manufacturers such as General Motors (Impact), Ford (Ecostar), Chrysler (TEVan), and foreign imports. The initial cost of converting a conventional vehicle to an electric vehicle is \$15,000-\$40,000. An electric vehicle has a range of 60-100 miles per charge. Charging time is eight hours at a 110 standard outlet and four hours at a 220 dedicated outlet. A "fast charge" of 20 minutes is under development. An electric vehicle has a top speed of 65-85 mph and a battery life of two to three years. Several batteries that are under development would provide longer driving ranges and longer periods of operation. Electric vehicles that would meet the needs of most drivers could be commercially available by the late 1990's. Electric vehicle technologies have been identified as one of twenty-two technologies critical to United States defense, economic competitiveness, public health, and energy independence by the National Critical Technologies panel. Other countries are working on an electric vehicle. The chance of the United States being a leader is enhanced by government utilities and the domestic auto industry working as a team.

Sheila Holman, Unit Supervisor, Attainment Planning Unit, Air Quality Section, Department of Environment, Health, and Natural Resources, gave a progress report on the attainment of air quality standards in North Carolina relative to CAAA. The major air quality problems in North Carolina are ozone and carbon monoxide. An area is designated a nonattainment area for carbon monoxide when that area violates the air quality standards under the Clean Air Act four times over a three year period. An area may be redesignated an attainment area for carbon monoxide by: (1) showing that the area has maintained air quality standards for three consecutive years, and (2) showing that attainment can be maintained for ten years. Mecklenburg, Forsyth, Durham, and Wake Counties have been in nonattainment for carbon monoxide; however, at present, only the Raleigh-Durham area is "marginally in attainment." The other areas have been redesignated as "in attainment." North Carolina has requested the United States EPA to redesignate its nonattainment areas for ozone. Currently EPA has redesignated

the Triad Area (Greensboro, Winston-Salem, High Point) and the Raleigh-Durham area for ozone. EPA is reviewing Charlotte's redesignation request on ozone. The oxygenated fuel program in the Raleigh-Durham area must stay in place, even though the area is in attainment for carbon monoxide, due to anticipated vehicular growth in the area over the next ten years.

Calvin Leggett, Director, Planning and Programming, Division of Highways, NC Department of Transportation, discussed the possible uses of Congestion Mitigation Air Quality (CMAQ) Funds under the Intermodal Surface Transportation Efficiency Act (ISTEA). CMAQ is one of five programs under ISTEA. CMAQ reflects transportation's responsibility to the environment. CMAQ funds may be used for projects in nonattainment areas only. To receive funding, the projects must contribute to meeting national ambient air quality standards. Total CMAQ funding appropriated is \$6 billion over 6 years, with each state receiving a guaranteed minimum of 1/2% of these funds each year. Typical projects that have been approved by the Federal Highway Administration and the United States Department of Energy to be funded with CMAQ funds include: transit improvements, shared-ride services, traffic flow improvements, demand management strategies, pedestrian and bicycle programs, and inspection and maintenance programs. North Carolina received almost \$10 million per year in CMAQ funds for the last three years; however, only 90% of these authorized funds were actually budgeted. North Carolina projects use 80% federal funds matched with 20% in State funds. CMAQ funds are authorized to the states based on population. In 1995 it is estimated that North Carolina will receive less than \$5 million when our nonattainment areas are redesignated.

Walter H. Neely, Jr., Assistant Director for Transportation, Charlotte-Mecklenburg Schools, described CNG use in school buses based on the pilot project that involved the Charlotte-Mecklenburg School system. Originally Mr. Neely was very skeptical of using alternative fuel. Most of the research and practical applications of alternative

fuels in school buses pointed to CNG as the most effective alternative fuel to use for the pilot project. They selected six gas engine buses to be retrofitted with conversion kits and CNG cylinders. Piedmont Natural Gas provided labor to install the conversion kits and tanks at a cost of approximately \$6,500 per bus. The county fire marshal inspected the buses for safety and proper installation. The buses were refueled using the slow-fill method at night for four hours. The operation began in August of 1992. The CNG buses have been in continuous use for two years, and the general impressions have been very favorable. At idle, the CNG buses produced 68% less hydrocarbon and had 90% less carbon monoxide emissions. At cruise, the CNG buses produced 32% less hydrocarbon and 75% less carbon monoxide emissions. The cost of fuel per mile for the CNG buses was \$.0795 compared to \$.0773 for diesel buses and \$.1330 for the standard gasoline buses.

November 17, 1994

Delegate Arthur R. "Pete" Giesen, Member of the Virginia General Assembly, Chairman of the Joint Subcommittee Studying the Use of Vehicles Powered by Clean Transportation Fuels, appeared before the Committee to discuss the accomplishments of his committee. During the first year of its operation, the committee had the primary tasks of educating itself and then educating others inside and outside state government as to what alternative fuels were and how they could benefit Virginia from an environmental and economic point of view. Virginia's Literary Fund provides low-interest loans to various school systems for alternative fuel refueling stations, particularly for stations to refuel school buses with CNG. Virginia has enacted approximately forty laws related to clean fuels. Among these are bills to provide that: (1) the Virginia Board of Education promote the use of alternative fuels by school buses; (2) the Virginia Board of Education regulations not unreasonably limit use of

alternative fuels in school buses; (3) the Virginia Alternative Fuels Revolving Fund is created to provide low-interest loans to local governments and state agencies to convert vehicles from conventional fuels to alternative fuels; (4) "products used as motor vehicle fuels" are exempt from local utility taxes; (5) older, dirtier, motor vehicles may be retired; (6) the motor vehicle sales and use tax on vehicles "manufactured to use compressed natural gas, liquified natural gas, liquified petroleum gas, hydrogen or electricity as a source of propulsion" is reduced from 3% to 1 1/2%; (7) the usual special fuel tax rate of 16 cents per gallon is reduced to 10 cents for alternative fuels; (8) an annual tax is assessed at the rate of \$50 per vehicle on vehicles using these fuels when those vehicles are fueled at a private residence or "use clean special fuels upon which the tax imposed on clean special fuels has not been paid"; (9) a state income tax credit of 10% of the amount is allowed as a deduction from federal income tax for the purchase of clean fuel vehicles and certain refueling equipment. Two other clean fuel measures were carried over to the 1995 Session of the Virginia General Assembly and are still pending. One bill provides a subsidy to Virginia manufacturers of AFV's and eliminates the annual \$10 surcharge on special license plates for clean fuel vehicles. The other bill provides a \$700 corporate income tax credit for any business that creates a job related to components or labor to convert vehicles to AFV's.

Tim Butler, Building System Engineer, Energy Division, Department of Commerce, discussed recommendations from the Department regarding proposed legislation to this Committee. The objectives of these recommendations are to: (1) reduce reliance on petroleum-based fuels within the State; (2) improve air quality by increasing the use of near zero emission vehicles; and (3) stimulate the development of infrastructure necessary to support the use of AFV's within the State. Regulatory incentives ought to be applied equally, permitting free competition among the various alternative fuels and suppliers. The market should be allowed to determine those fuels to be used in various regions of the State. Financial and regulatory incentives should

facilitate State government, private businesses, and local governments in meeting EPACT provisions. North Carolina's metropolitan areas affected under EPACT are the Charlotte-Gastonia, Greensboro-Winston-Salem-High Point, and Raleigh-Durham areas. Alternative fuels are defined under EPACT as methanol, ethanol, other alcohol mixtures that consist of at least 70% alcohol blended with gasoline or other fuels, compressed natural gas, liquified petroleum, hydrogen, coal-derived liquid fuels, fuels derived from "biological" materials, electricity, and any other fuel substantially not petroleum.

He recommended that the Committee endorse a series of proposals that the Energy Division identified as Priority #1 through Priority #3. Because accurate fiscal impacts of Priorities #2 and #3 had not been prepared, the Energy Division offered Priority #1 as its only recommendation at this time, and refrained from recommending Priorities #2 and #3 until a full fiscal assessment is obtained.

As part of Priority #1, the Committee should propose legislation that designates a single State agency as the lead agency in developing a comprehensive State alternative fuels transportation plan that will address the requirements of EPACT. The designated State agency should have the authority to implement the plan and collect and maintain data necessary to document the State's level of compliance with EPACT. Annually, the designated state agency should report its progress in achieving the requirements of EPACT to both the Joint Legislative Commission on Governmental Operations and the General Assembly. A board should be created that will serve in an advisory capacity to the designated agency. This board should provide input to the development of the alternative fuels transportation plan and offer guidance in developing methods to assess whether the State has complied with EPACT.

The question arose as to what agency would be the appropriate agency to develop the plan to implement EPACT. Lisa Piercy with the Department of Administration stated that the Department only had authority over vehicles under Motor Fleet Management and that the majority of vehicles under Motor Fleet Management were

passenger vehicles. She stated that the Department of Transportation (DOT) had their own "fleet;" however, the majority of those DOT vehicles are the heavier duty vehicles that are not subject to the purchase requirements of EPACT. Discussion ensued with regards to the roles of various State agencies that purchase their own vehicles. All vehicles owned by the State are purchased through the Division of Purchase and Contract in the Department of Administration. Representative Brawley moved to draft legislation making the Department of Administration the lead agency in developing a plan and proposed that the members of the proposed advisory board be designated in the legislation. DOT and the Department of Public Instruction should be included in the advisory board.

Further, it was recommended under Priority #1 that the North Carolina Utilities Commission should be encouraged to permit utilities to offer incentive rates for electric and other regulated alternative fuels that take into account traditional rate-making issues including demand-side management into consideration. The Committee instructed staff to write a letter to the Utilities Commission on behalf of the Committee recommending that the Commission reduce rates for alternative fuels.

Also, Priority #1 should include a provision that prohibits regulations that would unreasonably limit the authority of any local education unit to purchase and use school buses using compressed natural gas, electricity, propane, or any other alternative fuels.

Under Priority #2, legislation is recommended that would create a low-interest revolving loan fund available only to local governments to: (1) provide 50% of the installed cost of refueling or electrical recharging facilities needed for alternative fuel vehicles and (2) support the incremental cost of alternative fuels vehicles or vehicle conversions above the number required by EPACT.

Under Priority #2, legislation is recommended to provide tax credits equal to 15% of the cost of constructing a refueling or recharging facility and for the cost of refueling and recharging equipment not to exceed \$15,000 for each tax credit to private

businesses who purchase and install refueling or recharging facilities or equipment for use by fleets, the general public, or local governments and other tax-exempt entities through leasing or other agreements.

Under Priority #3, legislation is recommended that would either eliminate or reduce North Carolina motor fuel taxes currently charged on methanol, ethanol, compressed natural gas, liquefied natural gas, and propane when used as a vehicle fuel.

Representative Brawley and Representative McLaughlin recommended that legislation should be drafted to accomplish all priorities.

John T. Massey, Interim Director, Motor Fleet Management, Department of Administration, discussed how Motor Fleet Management was striving to keep abreast of the direction being given by the United States Department of Energy concerning federal mandates involving alternative fuels. Motor Fleet Management faces many obstacles in complying with EPACT requirements, due to the lack of availability of alternative fuels, uncertainty in the development and manufacture of alternatively fueled vehicles, and changes to the regulations that may occur before compliance is required by the State fleet in 1996. In 1993 Motor Fleet Management ordered conversion kits for General Motors vehicles. When the kits arrived the following year, Chrysler vehicles were under contract and the kits did not fit the Chrysler vehicles. Now, General Motors has the contract and these kits will be able to be used during 1995.

Staff Counsel Susan Iddings discussed problems with determining the number of "fleet" vehicles in State government. Currently there is no way to determine purchase mandates for North Carolina as there is no way to assess the number of vehicles in a "fleet" within the meaning of EPACT. All State vehicles are not under Motor Fleet Management. Some State agencies purchase their own vehicles, making it difficult to determine how many State vehicles are in a State fleet.

December 8, 1994

The Committee reviewed proposed legislation that was recommended by the Department of Commerce at the meeting on November 17, 1994. The Committee discussed the letter to the North Carolina Utilities Commission on behalf of the Committee to urge the Utilities Commission to reduce rates for alternative motor fuels. At the previous meeting, it had been decided this recommendation could be accomplished without legislation and that a letter would suffice. The Committee voted to include this letter in its draft report.

Draft Bill #2, the proposed draft legislation, entitled State Plan to Implement the Energy Policy Act, was discussed. This bill provided that the Department of Administration be the lead agency in developing a plan to implement EPACT requirements and that the Governor appoint an advisory board to work with the Department of Administration in formulating this plan. Staff Counsel Susan Iddings advised the Committee that the enactment of EPACT created a federal mandate. The State was faced with implementing this mandate whether this Committee recommends legislation to plan its implementation or not. Senator Paul Smith informed the Committee that new mandates regarding the postponement or delaying of the requirements of EPACT may come after the new Congress convenes and that legislation by the State may not be necessary. Representative McLaughlin wanted to know if there would be any problems if the Committee did nothing. Staff Counsel Susan Iddings stated that if there was no delay at the federal level, the State would be faced with having to make the purchases of these alternative fueled vehicles without an organized method to proceed in place. The Committee discussed whether it might be prudent to wait on this until later to determine if EPACT is delayed or repealed. Senator Smith requested that a fiscal note be prepared indicating the cost to the State of implementing EPACT. The current fiscal note only stated the cost of implementing Draft #2, which provides for the development of a plan.

Draft #3 concerned proposed legislation to establish an Alternative Fuel Loan Fund to provide loans to units of local governments in order to promote the use of alternative fuels for alternative fueled vehicles. Senator Smith stated that he would like the League of Municipalities to take a look at this proposed legislation and see how it would affect them before taking any action on it.

The Committee next reviewed Draft #4, which was proposed legislation dealing with a corporate tax credit for an alternative fuel facility. Fiscal information was not available yet. The information will be available for the next meeting to include an estimate of the cost of these alternative fueling stations, the number of vehicles by percentage that would be affected by the federal legislation, the number of State vehicles affected, and the number of stations needed to service these vehicles.

Draft #5 and Draft #6 were discussed by the Committee. Draft #5 concerns a reduction in motor fuel tax for alternative transportation fuels, and Draft #6 concerns eliminating the motor fuel tax for alternative vehicles.

Draft #7 was discussed. This is a resolution to continue the current study. The Committee voted to include this resolution in the final report.

December 19, 1994

The purpose of this meeting was to continue reviewing the draft legislative proposals for possible inclusion in the Committee's final report to the 1995 General Assembly. Senator Smith again raised the point that the new Congress was probably going to repeal or delay the implementation of EPACT and that maybe the Committee should wait and see what was going to happen before the State proceeded. Further discussion ensued with reference to these possibilities. Draft #1 recommended that the Department of Administration be the lead agency in developing a plan to implement EPACT. It was proposed that this could be done without legislation. Evan Rodewald

of the Fiscal Research Division presented some fiscal information indicating that a rough estimate of the cost to the State of implementing EPACT is \$4,859,310 over a five year period. (See Appendix D.) Doug Culbreth of the Department of Commerce explained that an agreement had been reached between the Department of Commerce, the Department of Administration, the Department of Transportation, and the Office of the Governor to establish a working group to plan for the implementation of EPACT should the State need such a plan. This working group would include a representative from the Department of Transportation, the Office of the Governor, the Department of Commerce, and Department of Administration and would report periodically to either the Legislative Research Commission on Energy Conservation and use of Renewable Energy Sources, if authorized to continue, or the Joint Legislative Commission on Governmental Operations. The Committee agreed to include this proposal to establish an informal working group in the report to the General Assembly. No legislation is needed to accompany this recommendation.

The Committee voted to include in its draft final report Draft #3, a bill that creates an alternative fuel loan fund to provide low-interest loans to local government units to promote the use of alternative fuels, as well as Draft #4, a bill that grants a corporate tax credit for the construction of an alternative fuel refueling or recharging facility and for the cost of refueling or recharging equipment at new or existing facilities.

Drafts #5 and #6 of the Recommendations and Draft Legislation report prepared by Committee Counsel Susan Iddings were discussed together as a package since Draft # 5 proposed a reduction in motor fuel tax for alternative transportation fuels and Draft #6 proposed eliminating this tax on alternative fuels. Representative Brawley raised the point as to what affect the General Agreement on Tariffs and Trade (GATT) would have on this particular proposal. After some further discussion, Senator Johnson recommended that the Committee should communicate its concern regarding the effects

of GATT to the 1995 General Assembly. The Committee recommended accepting Draft #5 to reduce the motor fuel tax rather than Draft #6 to eliminate the tax.

Draft #7 was a rewrite of Senate Bill 95. This draft was submitted as a draft proposal at the request of Cochair Representative Bowman. This bill had previously passed the Senate and was put into the House Appropriations Bill. Representative Bowman stated that at some point it was deleted from the bill, and he wished it to be reconsidered by the 1995 General Assembly. This Committee had spent a good deal of time considering the State Facilities Energy Conservation Program as provided in this bill. The Committee recommended Senate Bill 95 to the 1993 General Assembly (1994 Regular Session) because it is a good plan, it was developed over the course of nine months, all affected agencies participated in its development, and it can save the State money while conserving energy use. The Committee agreed to include this proposal in its final report.

January 3, 1995

This was the final meeting of the Committee. Its purpose was to approve the final draft report to the 1995 General Assembly for transmittal to the Legislative Research Commission. After a general review of the draft report, the Committee voted to transmit to the Legislative Research Commission the draft report to the 1995 General Assembly.

FINDINGS AND RECOMMENDATIONS

RECOMMENDATION #1: THE DEPARTMENT OF ADMINISTRATION, THE DEPARTMENT OF COMMERCE, THE DEPARTMENT OF TRANSPORTATION, AND THE OFFICE OF THE GOVERNOR SHOULD ESTABLISH A WORKING GROUP TO PLAN FOR THE STATE TO MEET ITS ALTERNATIVE FUELED VEHICLE PURCHASING REQUIREMENTS PURSUANT TO THE ENERGY POLICY ACT OF 1992, 42 U.S.C., § 13201, ET SEQ. (EPACT) AND TO MAKE PERIODIC REPORTS OF ITS PROGRESS TO THE GENERAL ASSEMBLY.

Findings: Congress enacted the Energy Policy Act of 1992 (EPACT) for the purpose of reducing our nation's dependence on foreign oil. Congress enacted the Clean Air Act Amendments of 1990 (CAAA) for the purpose of improving air quality. Under EPACT, federal, State, and local government and certain private fleet owners that operate fleets of light-duty vehicles within metropolitan areas with a population of at least 250,000 as of 1980 will be required to purchase increasing numbers of alternative fueled vehicles (AFV's) in accordance with a prescribed schedule that extends from 1993 through the year 2006. Under CAAA, public and private fleet owners operating in certain metropolitan areas that are in severe nonattainment of either ambient ozone or carbon monoxide will be held to certain purchase requirements for clean fuel vehicles beginning in 1998. The State will encounter its first mandate pursuant to these federal acts in 1996 when, under EPACT, ten percent (10%) of its purchases of new light-duty vehicles for certain State fleets must consist of AFV's. By 1997, under EPACT, fifteen percent (15%) of the State's purchase of new light-duty vehicles for fleets are required to be AFV's; by 1998, twenty-five percent (25%); by 1999, fifty percent (50%); by 2000, seventy-five percent (75%). All purchases of State owned vehicles are made through the Purchase and Contract Division of the Department of

Administration. It is in the best interest of the nation and the State to reduce its reliance on imported oil and to promote the use of alternative fuels. The State should take a leadership role by implementing these federal acts in a timely manner; however, the Committee recognizes that the new Congress may repeal EPACT or delay its schedule for phasing in new AFV's. The prudent course is to plan for the implementation of EPACT in the event it remains in place as is. No legislation is needed to accomplish this goal. The most efficient and economical method of planning to meet the goals of the proposed legislation is through the formation of an informal working group comprised of a representative from: the Department of Administration, the Department of Commerce, the Department of Transportation, and the Office of the Governor. The working group should advise the General Assembly of the status of EPACT implementation at the federal level and develop its plan to implement EPACT at the State level accordingly. Also, this working group should provide the General Assembly with periodic progress reports starting as soon as possible, no later than September 1, 1995 for its first progress report. If the General Assembly reauthorizes this study committee, it should receive the periodic progress reports; otherwise, the reports should go to the Joint Legislative Commission on Governmental Operations and the Environmental Review Commission.

RECOMMENDATION #2: THIS COMMITTEE URGES THE NORTH CAROLINA UTILITIES COMMISSION TO REDUCE RATES FOR ELECTRICITY, NATURAL GAS, PROPANE, AND ANY OTHER ALTERNATIVE FUEL THAT IS REGULATED BY THE UTILITIES COMMISSION AND PURCHASED FOR THE PURPOSE OF PROPELLING MOTOR VEHICLES. (See Letter to the North Carolina Utilities Commission, Appendix E.)

Findings: The rates of alternative fuels that are regulated by the North Carolina Utilities Commission are set by the Utilities Commission. Rates for electricity, natural gas, and propane are the same without regard to whether they are being used to heat a building or propel a motor vehicle. It is in the best interest of the State to promote the use of alternative transportation fuels in order to improve air quality and to reduce our nation's dependence on foreign oil. To offer reduced rates for electricity, natural gas, propane, or any other alternative fuels when these fuels are purchased to be used as a transportation fuel would provide an incentive to use these fuels as transportation fuels. This Committee should present this recommendation to the North Carolina Utilities Commission in a letter from the Cochairs on behalf of the Committee.

RECOMMENDATION #3: TO PROMOTE THE USE OF ALTERNATIVE FUELS FOR VEHICLES, THE GENERAL ASSEMBLY SHOULD ENACT LEGISLATION TO ESTABLISH THE ALTERNATIVE TRANSPORTATION FUEL LOAN FUND TO PROVIDE LOANS TO UNITS OF LOCAL GOVERNMENT. (See Legislative Proposal I, Appendix F.)

Findings: Under the Energy Policy Act of 1992, 42 U.S.C. § 13201, et seq. (EPACT), federal, State, local government, and certain private fleet owners that operate fleets of light-duty vehicles within metropolitan areas with a population of at least 250,000 as of 1980 will be required to purchase increasing numbers of alternative fueled vehicles (AFV's) in accordance with a prescribed schedule that begins in 1993 and extends through the year 2006. Currently, units of local government in North Carolina will encounter their first mandates pursuant to EPACT in 1999, when twenty percent (20%) of their purchases of new light-duty vehicles for certain public fleets must consist of AFV's. By 2002, thirty percent (30%) of a local government's purchases of new light-duty vehicles for fleets are required to be AFV's; by 2003, forty

percent (40%); by 2004, fifty percent (50%); by 2005, sixty percent (60%); and by 2006, seventy percent (70%). It is in the best interest of the State to promote the use of AFV's and the construction of a fueling infrastructure to serve these vehicles. The State should take a leadership role by providing low-interest loans to units of local government (1) for the purchase of and conversion to AFV's for those AFV's that are purchased or converted in order to satisfy the mandates of EPACT, and (2) for expanding the alternative fuel infrastructure. Loans for infrastructure should not exceed fifty percent (50%) of the infrastructure cost. By creating a revolving loan fund, the State is providing an incentive to units of local government to purchase AFV's, to convert conventionally fueled vehicles to alternative fueled vehicles, and to construct alternative fuel refueling facilities for AFV's.

RECOMMENDATION #4: THE GENERAL ASSEMBLY SHOULD ENACT LEGISLATION THAT GRANTS A CORPORATE TAX CREDIT FOR THE CONSTRUCTION OF AN ALTERNATIVE FUEL REFUELING OR RECHARGING FACILITY AND FOR INSTALLATION OF REFUELING OR RECHARGING EQUIPMENT FOR ALTERNATIVE FUELED VEHICLES AT A REFUELING OR RECHARGING FACILITY. (See Legislative Proposal II, Appendix G.)

Findings: The State should promote the use of alternative fuels for transportation in order to reduce the nation's dependence on foreign oil and to improve air quality. The largest hurdle to greater use of alternative fuels is the present lack of an adequate infrastructure to service AFV's. The estimated cost of constructing refueling or recharging facilities to service AFV's ranges from \$75,000 to \$400,00, with \$150,000 as the average anticipated cost. Businesses need an incentive to take on the high cost of building refueling and recharging facilities and the cost of equipping existing or new facilities with equipment to refuel or recharge AFV's. The General Assembly, when

considering the legislative proposal, should consider whether the General Agreement on Tariffs and Trade (GATT) would have an impact on this legislation.

RECOMMENDATION #5: THE GENERAL ASSEMBLY SHOULD ENACT LEGISLATION TO REDUCE THE MOTOR FUEL TAX FOR ALTERNATIVE TRANSPORTATION FUELS. (See Legislative Proposal III, Appendix H.)

Findings: It is in the best interests of the State to promote the use of alternative fuels for motor vehicles. Tax incentives provide a powerful method to expand the use of these fuels. Many other states have used various kinds of tax incentives to encourage the use of these fuels, to encourage the purchase of alternative fueled vehicles, and to encourage the development of a fueling infrastructure for AVF's. Virginia has reduced its motor fuel tax from 16 cents to 10 cents for alternative fuels. North Carolina should reduce its motor fuel tax for alternative fuels. Currently, electric vehicles are not subject to a motor fuel tax or a special fuel tax. To provide parity among the various alternative fuels, electricity, when used to propel a motor vehicle, should be subject to the special fuels tax at the same rate as other alternative fuels.

RECOMMENDATION #6: THE GENERAL ASSEMBLY SHOULD ENACT LEGISLATION TO ESTABLISH THE STATE FACILITIES ENERGY CONSERVATION PROGRAM FOR SELECTING AND IMPLEMENTING ENERGY CONSERVATION MEASURES IN STATE FACILITIES AND PROVIDE A MECHANISM OF FUNDING ENERGY CONSERVATION MEASURES THAT ARE SECURED BY AN INTEREST IN THE PROPERTY PURCHASED BY AUTHORIZING THE DEPARTMENT OF ADMINISTRATION TO ENTER INTO ALTERNATIVE FINANCING AGREEMENTS AND BY AUTHORIZING THE ISSUANCE OF BONDS. (See Legislative Proposal IV, Appendix I.)

Findings: Energy Conservation projects that substantially reduce energy use provide an opportunity to save large sums of money by reducing utility bills. Energy conservation projects that substantially reduce energy use benefit the environment by slowing the depletion of nonrenewable energy sources and by reducing emissions that harm the environment and the health of the public. The State should take a leadership role in the area of energy conservation by providing a mechanism to fund improvements to existing State facilities for improvements that can substantially increase energy efficiency. The Legislative Research Commission on Ways to Promote the Conservation of Energy and the Use of Renewable Energy Sources in Residential, Commercial, Industrial, and Public Facilities recommended the same legislation to the 1993 General Assembly. That bill was introduced as Senate Bill 95 (companion bill House Bill 103) during the 1993 Legislative Session. Both of these bills were eligible for consideration during the 1993 General Assembly (1994 Regular Session). This Committee carefully reviewed this legislation at its January 1994 and April 1994 meetings and voted to submit an interim report to the Legislative Research Commission to recommend that the General Assembly enact Senate Bill 95. Senate Bill 95 passed the Senate and received serious consideration by the House. This legislative proposal is a rewrite of Senate Bill 95 with technical changes needed to make it ready for introduction to the 1995 General Assembly. This Committee and representatives from each of the affected agencies have devoted much time and effort to develop this bill. It provides a sound approach to fund energy conservation measures in existing State facilities without jeopardizing the State's financial standing. This bill can save the State money in the long term, and, at the same time, conserve our natural resources.

RECOMMENDATION #7: THE GENERAL ASSEMBLY SHOULD AUTHORIZE THE LEGISLATIVE RESEARCH COMMISSION TO CONTINUE TO STUDY WAYS TO PROMOTE ENERGY CONSERVATION AND THE USE OF RENEWABLE

ENERGY SOURCES IN NORTH CAROLINA. (See Legislative Proposal V, Appendix J.)

Findings: The Legislative Research Commission was authorized in 1991 to study Ways to Promote the Conservation of Energy and the Use of Renewable Energy Sources in Residential, Industrial, and Public Facilities. That study committee proved to be an excellent forum for different State agencies that have a role in promoting energy conservation; architects and engineers; industry; and environmental groups to present their respective opinions for needed changes and improvements in promoting energy conservation in buildings. This study committee found that energy conservation can save the State and its citizens substantial sums of money by reducing energy costs and at the same time protect the environment. In 1993, the Legislative Research Commission was authorized to continue its study of energy conservation and use of renewable energy sources. This Committee continued to look into energy conservation projects in public buildings that would save substantial sums of money in avoided utility bills. This Committee also studied alternative transportation fuels and found that the use of these fuels would reduce our dependence on foreign oil as well as serve to reduce toxic air emissions, thereby protecting air quality. Even after four years, there is much work remaining for this Committee to do. Energy conservation remains a largely untapped source of savings. Energy conservation protects our natural resources. The study of energy conservation in North Carolina should be continued.

APPENDIX A

HOUSE BILL 1319, 2ND EDITION

AN ACT TO AUTHORIZE STUDIES BY THE LEGISLATIVE RESEARCH COMMISSION, TO CREATE AND CONTINUE VARIOUS COMMITTEES AND COMMISSIONS, AND TO DIRECT VARIOUS STATE AGENCIES TO STUDY SPECIFIED ISSUES.

The General Assembly of North Carolina enacts:

PART I.-----TITLE

Section 1. This act shall be known as "The Studies Act of 1993".

PART II.-----LEGISLATIVE RESEARCH COMMISSION

Sec. 2.1. The Legislative Research Commission may study the topics listed below. Listed with each topic is the 1993 bill or resolution that originally proposed the issue or study and the name of the sponsor. The Commission may consider the original bill or resolution in determining the nature, scope, and aspects of the study.

The topics are: "... Ways to Promote Energy Conservation and the Use of Renewable Sources of Energy in North Carolina -- study continued (H.J.R. 104 and H.J.R. 150 - Bowman, S.B. 337 - Plexico)..."

Sec. 2.2. Committee Membership. For each Legislative Research Commission Committee created during the 1993-94 biennium, the cochairs of the Commission shall appoint the Committee membership.

Sec. 2.3. Reporting Dates. For each of the topics the Legislative Research Commission decides to study under this act or pursuant to G.S. 120-30.17(1), the Commission may report its findings, together with any recommended legislation, to the 1994 Regular Session of the 1993 General Assembly or the 1995 General Assembly, or both.

Sec. 2.4. Bills and Resolution References. The listing of the original bill or resolution in this Part is for reference purposes only and shall not be deemed to have incorporated by reference any of the substantive provisions contained in the original bill or resolution.

Sec. 2.5. Funding. From the funds available to the General Assembly, the Legislative Services Commission may allocate additional monies to fund the work of the Legislative Research Commission.

PART XI.-----APPROPRIATION FOR STUDIES

Sec. 11.1. From the appropriations to the General Assembly for studies, the Legislative Services Commission may allocate funds to conduct the studies authorized by this act.

PART XII.-----EFFECTIVE DATE

Sec. 12.1. This act is effective upon ratification. Part VI of this act is repealed on June 30, 1995.

GENERAL ASSEMBLY OF NORTH CAROLINA

SESSION 1993

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SENATE JOINT RESOLUTION 337*

Sponsors: Senators Plexico; Cooper, Ballance, Allran, Tally, Martin of Guilford, Daniel, Lee, Conder, Hartsell, Ward, Gunter, Seymour, and Albertson.

Referred to: Rules and Operation of the Senate.

February 24, 1993

1 A JOINT RESOLUTION AUTHORIZING THE LEGISLATIVE RESEARCH
2 COMMISSION TO CONTINUE TO STUDY WAYS TO PROMOTE ENERGY
3 CONSERVATION AND THE USE OF RENEWABLE ENERGY SOURCES IN
4 NORTH CAROLINA.

5 Whereas, the Legislative Research Commission was authorized in 1991 to
6 study Ways to Promote the Conservation of Energy and the Use of Renewable Energy
7 Sources in Residential, Commercial, Industrial, and Public Facilities; and

8 Whereas, this study committee proved to be an excellent forum for
9 different State agencies that have some role in promoting energy conservation,
10 architects and engineers, industry, and environmental groups to present their
11 respective opinions for needed changes and improvements in promoting energy
12 conservation; and

13 Whereas, this study committee found that energy conservation saves the
14 State and its citizens money by reducing energy costs and at the same time protects
15 the environment; and

16 Whereas, due to time constraints, this study committee was unable to
17 address all the important issues within the scope of its study; and it is in the best
18 interest of the State that these as well as other energy issues receive the attention and
19 consideration of a legislative study committee;

20 Now, therefore, be it resolved by the Senate, the House of Representatives
21 concurring:

22 Section 1. The Legislative Research Commission is authorized to study
23 ways to promote energy conservation and the use of renewable sources of energy in
24 North Carolina. The Commission may address all issues that bear on energy
25 conservation in this State.

1 Sec. 2. The Commission shall report its findings and recommendations to
2 the 1995 General Assembly and may make an interim report to the 1994 Regular
3 Session of the 1993 General Assembly.

4 Sec. 3. This resolution is effective upon ratification.

GENERAL ASSEMBLY OF NORTH CAROLINA

SESSION 1993

H

1

HOUSE JOINT RESOLUTION 104*

Sponsors: Representatives Bowman, Bowen, Brawley, Brubaker, Jeffus, Luebke, Stewart; and Justus.

Referred to: Rules, Calendar and Operations of the House.

February 10, 1993

1 A JOINT RESOLUTION AUTHORIZING THE LEGISLATIVE RESEARCH
2 COMMISSION TO CONTINUE TO STUDY WAYS TO PROMOTE ENERGY
3 CONSERVATION IN BUILDINGS IN NORTH CAROLINA.

4 Whereas, the Legislative Research Commission was authorized in 1991 to
5 study Ways to Promote the Conservation of Energy and the Use of Renewable Energy
6 Sources in Residential, Commercial, Industrial, and Public Facilities; and

7 Whereas, this committee proved to be an excellent forum for different
8 State agencies that have some role in promoting energy conservation, architects and
9 engineers, industry, and environmental groups to present their respective opinions for
10 needed changes and improvements in promoting energy conservation; and

11 Whereas, this committee found that energy conservation saves the State
12 and its citizens money by reducing energy costs and at the same time protects the
13 environment; and

14 Whereas, due to time constraints, this committee was unable to address
15 all the important issues within the scope of its study; and it is in the best interests of
16 the State that these energy issues receive the attention and consideration of a
17 legislative study committee;

18 Now, therefore, be it resolved by the House of Representatives, the Senate
19 concurring;

20 Section 1. The Legislative Research Commission is authorized to
21 continue the study of ways to promote energy conservation in buildings in North
22 Carolina. The Commission may address all issues that bear on energy conservation
23 in residential, commercial, industrial, and public facilities, especially State facilities.

1 Sec. 2. The Commission shall report its findings and recommendations to
2 the 1995 General Assembly and may make an interim report to the 1994 Session of
3 the 1993 General Assembly.

4 Sec. 3. This resolution is effective upon ratification.

GENERAL ASSEMBLY OF NORTH CAROLINA

SESSION 1993

H

1

HOUSE JOINT RESOLUTION 150*

Sponsors: Representatives Bowman, Bowen, Brawley, Brubaker, Jeffus, Luebke, Stewart; Colton, Hall, and G. Miller.

Referred to: Rules, Calendar and Operations of the House.

February 15, 1993

1 A JOINT RESOLUTION AUTHORIZING THE LEGISLATIVE RESEARCH
2 COMMISSION TO CONTINUE TO STUDY WAYS TO PROMOTE ENERGY
3 CONSERVATION AND THE USE OF RENEWABLE ENERGY SOURCES IN
4 NORTH CAROLINA.

5 Whereas, the Legislative Research Commission was authorized in 1991 to
6 study Ways to Promote the Conservation of Energy and the Use of Renewable Energy
7 Sources in Residential, Commercial, Industrial, and Public Facilities; and

8 Whereas, this study committee proved to be an excellent forum for
9 different State agencies that have some role in promoting energy conservation,
10 architects and engineers, industry, and environmental groups to present their
11 respective opinions for needed changes and improvements in promoting energy
12 conservation; and

13 Whereas, this study committee found that energy conservation saves the
14 State and its citizens money by reducing energy costs and at the same time protects
15 the environment; and

16 Whereas, due to time constraints, this study committee was unable to
17 address all the important issues within the scope of its study; and it is in the best
18 interest of the State that these as well as other energy issues receive the attention and
19 consideration of a legislative study committee;

20 Now, therefore, be it resolved by the House of Representatives, the Senate
21 concurring:

22 Section 1. The Legislative Research Commission is authorized to study
23 ways to promote energy conservation and the use of renewable sources of energy in
24 North Carolina. The Commission may address all issues that bear on energy
25 conservation in this State.

1 Sec. 2. The Commission shall report its findings and recommendations to
2 the 1995 General Assembly and may make an interim report to the 1994 Regular
3 Session of the 1993 General Assembly.

4 Sec. 3. This resolution is effective upon ratification.

APPENDIX B

MEMBERSHIP OF LRC COMMITTEE ON

ENERGY CONSERVATION AND USE OF RENEWABLE ENERGY SOURCES

LRC MEMBER: Sen. Lura S. Tally
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(910)483-4175

President Pro Tempore's Appointments

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(910)488-9358

Mr. C.J. Belch
P.O. Box 771
Plymouth, NC 27962

Mr. Ronald Gibson
Vice-President, Customer Services
Duke Power
P.O. Box 1006 (EC 13D)
Charlotte, NC 28201-1006

Sen. Joe E. Johnson
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Raleigh, NC 27622
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Sen. John H. Kerr
P.O. Box 1616
Goldsboro, NC 27533
(919)734-1841

Sen. Clark Plexico
P.O. Box 1904
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(704)696-9435

Mr. Jimmy Smith
P.O. Box 667
Burgaw, NC 28425

Sen. Paul Smith
P.O. Box 916
Salisbury, NC 28145
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Speaker's Appointments

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(910)228-7521

Rep. Edward C. Bowen
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Harrells, NC 28444
(910)532-4183

Rep. C. Robert Brawley
Route 10, Box 256
 Mooresville, NC 28115
(704)663-2635

Rep. Thomas K. Jenkins
P.O. Box 626
Franklin, NC 28734
(704)369-2377

Rep. Theodore J. Kinney
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Fayetteville, NC 28301
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Rep. John B. McLaughlin
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Newell, NC 28126
(704)596-0845

Rep. George S. Robinson
P.O. Box 1558
Lenoir, NC 28645
(704)728-2902

Staff:

Ms. Susan Iddings
Bill Drafting Division
(919)733-6660

Clerk:

Ms. Jenny Umstead
1311 Legislative Building
O: (919)733-5805
H: (919)847-2435

APPENDIX C

SPEAKERS APPEARING BEFORE THE COMMITTEE

Steve Levitas, Deputy Secretary, Department of Environment, Health,
and Natural Resources

Tim Butler, Chief, Conservation Section, Energy Division, Dept. Commerce

Speros Fleggas, Director, Office of State Construction,
Department of Administration

Marshall Mauney, Architect, Division of School Facility Services,
Department of Public Instruction

Doug Culbreth, Director, Energy Division, Department of Commerce

Robert L. Powell, Deputy State Budget Officer, Office of
State Budget and Management

Robert M. High, Director, State and Local Government Finance,
Department of State Treasurer

Robert Powell, Architect, Greensboro, North Carolina

Gene Causby, Executive Director, NC School Boards Association

James B. Blackburn, General Counsel, NC Assoc. of County Comm.

Andrew L. Romanet, General Counsel, NC League of Municipalities

Jack Connell, Honeywell, Inc., Raleigh, NC

Jeff Crenshaw, Johnson Controls, Inc., Raleigh, NC

Kenneth Flowers, Fiscal Analyst, Fiscal Research Division,
NC General Assembly

D. G. Martin, Vice President of Public Affairs, University of
North Carolina General Administration

Bryan Manning, Mechanical Engineer, National Vehicles and Fuel
Emissions Laboratory, U.S. Environmental Protection Agency,
Ann Arbor, Michigan

Charles L. Feltus, Technology Marketing, US Department of Energy,
Atlanta Support Office, Atlanta, Georgia

Burt Cox, Mobile Source Planning Supervisor, Air Resources Division,
New Hampshire Dept. of Environmental Services

Jackie Cummins, Policy Associate, National Conference of State Legislatures, Denver, Colorado

Peter Kelly-Detwiler, Senior Research Associate, The Goodman Group, Consultants, Boston, Massachusetts

Greg Martin, Staff, Southern States Energy Board, Atlanta, Georgia

Jeff Tsai, Research Associate, Institute for Transportation Research and Education, NC State University

Lee Hauser, Deputy Commissioner, NC Department of Insurance

D. George Lipford, Southeast Sales Coordinator, Propane Marketing, Conoco Inc., Research Triangle Park

Greg A. Johnson, Supervisor, Natural Gas Vehicle Marketing & Technology Support, Piedmont Natural Gas Company, Charlotte, NC

Don Mitchell, Marketing, Legislative & Regulatory Affairs, Exxon Co. U.S.A., Houston, Texas

Tim S. Shawver, Manager, Electric Vehicle Program, Duke Power Co., Charlotte, NC

Sheila Holman, Unit Supervisor, Attainment Planning Unit, Air Quality Section, Department Environment, Health, and Natural Resources

Calvin Legett, Director, Planning & Programming, Division of Highways, Department of Transportation

Walter H. Neely, Jr., Assistant Director Transportation, Charlotte-Mecklenburg Schools, Charlotte, NC

John T. Massey, Interim Director, Motor Fleet Management, Department of Administration

Arthur R. "Pete" Giesen, Delegate, Virginia General Assembly, Chairman Joint Subcommittee Studying Use of Vehicles Powered by Clean Transportation Fuels



North Carolina General Assembly

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TERRENCE D. SULLIVAN, Director
 Research Division
 Suite 545, (919) 733-2578

TO: Members, LRC on Energy Conservation
 and Use of Renewable Energy Sources

FROM: Evan Rodewald *E.R.*
 Fiscal Research Division

DATE: December 15, 1994

RE: Rough Estimate of the Fiscal Impact of Epact

Estimating the cost of implementing EPACT is difficult for several reasons:

- The state has no precise estimates of the number of the vehicles that are subject to EPACT
- The state has no implementation plan
- The optional "mix" of Alternative Fuel Vehicles (compressed natural gas, propane, methane, electric, etc.) has not been established
- The number and size of fuel stations necessary for the state to comply with EPACT has not been established.

These information constraints prevent Fiscal Research from projecting compliance costs with any precision. However, under a number of simplifying assumptions, this report provides a rough "ballpark" estimate of what EPACT could cost North Carolina.

Based on the assumptions and methodology discussed below, we believe that EPACT may cost North Carolina approximately \$5 million over a five year period.

Assumptions/Methodology

State fleet size:

The size of the state's fleet that is subject to EPACT was estimated to be about 2,900. The number was obtained in an informal survey of the five departments that own most of the state's light duty vehicles: DOT, Motor Fleet Management, Human Resources, Corrections, and the university system.

Per vehicle cost premium:

The estimates are based on the \$4,000 premium Chrysler currently charges for its natural gas vehicles.

Required number of fueling stations:

The number of fueling stations required is very difficult to estimate. Representatives from the Public Service Company of North Carolina believed, based on data from the Natural Gas Vehicle coalition, that three stations for each of the three affected Metropolitan Statistical Areas (for a total of nine stations) would be a reasonable assumption.

Station costs:

The costs of natural gas fueling stations vary from \$75,000 to \$500,000 according to size, capacity and whether fast fill, slow fill or some combination of the two is required. Other variables include the cost of real estate, labor and local codes and standards. Our cost estimate of \$150,000 per station is based on conversations with industry representatives.

Number of new vehicles purchased:

The estimates assume that one-sixth of the fleet (or 17%) will be replaced with new vehicles every year. This number is based on Motor Fleet Management standards.

Fuel savings:

Compressed natural gas is a more cost efficient fuel source than is gasoline. However, the economics of using compressed natural gas are difficult to quantify at this time. Fuel efficiency savings are not incorporated into our cost estimates.

Inflation:

The cost estimate assumes no inflation in costs.

Fleet Expansion:

The cost estimate assumes no expansion in the size of the state fleet.

TECHNICAL APPENDIX
FISCAL IMPACT OF EPACT
COST CALCULATIONS

COSTS

Fleet Size:	2949	
New Vehicles Purchased:	17%	
Per Vehicle Premium:	\$4,000	

New Vehicles that are AFV:

	% of New Purchases	New AFV Vehicles	
Year 1 -	10%	50	\$200,532
Year 2 -	15%	75	\$300,798
Year 3 -	25%	125	\$501,330
Year 4 -	50%	251	\$1,002,660
Year 5 -	75%	376	\$1,503,990
Total		877	\$3,509,310

Fueling Stations:	9	
Per Station Cost:	\$150,000	

Estimated Fueling Station Cost:		\$1,350,000
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Total 5 Year Estimate:		\$4,859,310
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APPENDIX E
STATE OF NORTH CAROLINA
LEGISLATIVE RESEARCH COMMISSION
STATE LEGISLATIVE BUILDING
RALEIGH 27601-1096



December 20, 1994

Judge H. A. Wells, Chairman
North Carolina Utilities Commission
Post Office Box 29510
Raleigh, North Carolina 27626-0510

To the North Carolina Utilities Commission:

We, Senator C. R. Edwards and Representative J. Fred Bowman, Co-Chairs of the Legislative Research Commission Study Committee on Energy Conservation and Use of Renewable Energy Sources, urge the North Carolina Utilities Commission, on behalf of our Committee's members, to authorize utilities in the State to reduce rates for electricity, natural gas, propane, and any other fuels that are subject to your jurisdiction when these fuels are purchased to propel motor vehicles. Further, our Committee urges your Commission, when deciding how much to reduce rates for alternative transportation fuels, to take into consideration the affect these rates will have on the demand for these alternative transportation fuels, and implement rates that will promote the use of alternative fuels.

Our Committee has studied alternative transportation fuels since September, 1994, and it has been found that it is in the best interests of our State to promote the use of alternative transportation fuels in order to improve air quality and to reduce our nation's dependence on foreign oil.

Accordingly, our Committee is recommending five legislative proposals to the 1995 General Assembly, in addition to this formal recommendation by our Committee requesting action by your Commission to reduce rates for fuels purchased for use as alternative transportation fuels.

Respectfully submitted,

Senator C. R. Edwards

Representative J. Fred Bowman



GENERAL ASSEMBLY OF NORTH CAROLINA

SESSION 1995

H

D

95-LD-007B(1.1)

(THIS IS A DRAFT AND NOT READY FOR INTRODUCTION)

Short Title: Alternative Fuel Loan Fund.

(Public)

Sponsors: Representatives Brawley, McLaughlin, Bowen, Robinson.

Referred to:

1 A BILL TO BE ENTITLED
2 AN ACT TO ESTABLISH THE ALTERNATIVE TRANSPORTATION FUEL LOAN FUND
3 TO PROVIDE LOANS TO UNITS OF LOCAL GOVERNMENT IN ORDER TO
4 PROMOTE THE USE OF ALTERNATIVE FUELS FOR VEHICLES.
5 The General Assembly of North Carolina enacts:
6 Section 1. Chapter 113B of the General Statutes is
7 amended by adding a new Article to read:
8 "ARTICLE 3.
9 "Alternative Transportation Fuel Loan Fund.
10 "§ 113B-30. Findings; purpose.
11 (a) The General Assembly finds that:
12 (1) Congress enacted the Energy Policy Act of 1992
13 (EPACT) for the purpose of reducing our nation's
14 dependence on foreign oil;
15 (2) Congress enacted the Clean Air Act Amendments of
16 1990 (CAAA) for the purpose of improving air
17 quality.
18 (3) Under EPACT, federal, state, local government, and
19 certain private fleet owners that operate fleets of
20 light duty vehicles within metropolitan areas will
21 be required to purchase increasing numbers of
22 alternative fueled vehicles (AFV's) in accordance
23 with a prescribed schedule that begins in and
24 extends 1993 through the year 2006.

- 1 (4) Under EPACT, a fleet consists of at least 20
2 vehicles that are primarily used in a metropolitan
3 area (population of 250,000 or more in 1980) that
4 are centrally fueled or capable of being centrally
5 fueled and that are owned or operated by a person
6 that has 50 or more vehicles nationwide.
- 7 (5) Under CAAA, public and private fleet owners
8 operating in metropolitan areas that are in severe
9 nonattainment of either ambient ozone or carbon
10 monoxide will be held to certain purchase
11 requirements for clean fuel vehicles, beginning in
12 1998.
- 13 (6) Units of local government in North Carolina will
14 encounter their first mandates pursuant to these
15 federal acts in 1999 when, under EPACT, twenty
16 percent (20%) of their purchases of new light-duty
17 vehicles for certain public fleets must consist of
18 AFV's.
- 19 (7) By 2002, under EPACT, thirty percent (30%) of a
20 local government's purchases of new light-duty
21 vehicles for fleets are required to be AFV's; by
22 2003, forty percent (40%); by 2004, fifty percent
23 (50%); by 2005, sixty percent (60%); and by 2006,
24 seventy percent (70%).
- 25 (8) It is in the best interest of the nation and the
26 State to reduce its reliance on imported oil and to
27 promote the use of alternative fueled vehicles and
28 the construction of a fueling infrastructure to
29 serve these vehicles.
- 30 (9) The State should take a leadership role by
31 encouraging units of local government to use
32 alternative fuels in vehicles by providing loans to
33 units of local governments to be used to purchase
34 alternative fueled vehicles and to expand
35 alternative fuel infrastructure.
- 36 (10) The establishment of a revolving loan fund will
37 provide incentives to units of local government to
38 purchase alternative fueled vehicles, to convert
39 conventional fuel vehicles to operate on
40 alternative fuels, and to construct alternative
41 fuel fueling facilities.
- 42 (b) The purpose of this Article is to facilitate and encourage
43 construction of alternative transportation fueling infrastructure
44 and the purchase of alternative fueled vehicles by units of local

1 government by establishing a revolving loan fund to assist in
2 financing such endeavors. This fund will enable units of local
3 government to obtain low-interest loans to use for these
4 purposes.

5 "§ 113B-31. Definitions. As used in this Article:

- 6 (1) 'Alternative fuel' has the meaning provided in
7 EPACT.
8 (2) 'Alternative fueled vehicle' (AFV) has the meaning
9 provided in EPACT.
10 (3) 'Department' means the Department of Commerce.
11 (4) 'EPACT' means the Energy Policy Act of 1992, 42
12 U.S.C. § 13201, et seq.
13 (5) 'Incremental cost' has the meaning provided in
14 EPACT.

15 "§ 113B-32. Alternative Transportation Fuel Loan Fund.

16 (a) The Alternative Transportation Fuel Loan Fund is
17 established in the Department of Commerce. The Fund is to be
18 administered by the Department as a revolving fund. The
19 Department shall be responsible for receipt and disbursement of
20 all moneys in the Fund. The Fund shall be invested in the same
21 manner as permitted for investments of funds belonging to the
22 State or held by the State Treasurer. Interest earnings shall be
23 credited to the Fund.

24 (b) The Alternative Transportation Fuel Loan Funds shall
25 consist of:

- 26 (1) All funds appropriated or accruing to the Fund.
27 (2) Contributions and grants from public or private
28 sources.
29 (3) Payments on loans made from the Fund.

30 "§ 113B-33. Use of moneys in the Alternative Transportation Fuel
31 Loan Fund.

32 (a) All moneys in the Alternative Transportation Fuel Loan
33 Fund shall be used for low-interest loans to units of local
34 government to provide:

- 35 (1) Up to fifty-percent (50%) of the capital cost of
36 constructing an alternative fuel refueling or
37 recharging facility that refuels or recharges
38 vehicles with an alternative fuel.
39 (2) The incremental cost of alternative fueled vehicles
40 for those alternative fueled vehicles that are
41 purchased in order to satisfy the mandates of
42 EPACT.
43 (3) The cost, including the cost of labor, of
44 converting conventional vehicles to alternative

1 fueled vehicles for those vehicles that are
2 converted in order to satisfy the mandates of
3 EPACT.

4 (b) A loan to a unit of local government under this Article
5 for an alternative fuel refueling or recharging facility shall be
6 for a term not to exceed the number of years equal to seventy-
7 five percent (75%) of the projected useful life of the facility.
8 A loan to a unit of local government under this Article for
9 alternative fueled vehicles shall be for a term not to exceed
10 four years.

11 (c) The Department shall adopt rules establishing an
12 application process; standards for eligibility for loans;
13 criteria and priorities that form a basis for selecting
14 applicants to receive loans; conditions and terms of repayment;
15 any procedures needed to administer this Article in accordance
16 with its purpose; and any other rule needed to implement this
17 Article.

18 (d) Beginning on October 1, 1996 and annually thereafter, the
19 Department shall report to the Joint Legislative Commission on
20 Governmental Operations. This report shall include:

21 (1) Identification of each recipient of a loan during
22 the preceding fiscal year, the amount of each loan,
23 the use of the loan moneys by the recipient unit,
24 and other terms of each loan.

25 (2) The amounts repaid to the Fund during the preceding
26 fiscal year, by recipient.

27 (3) A summary for the preceding five years of the total
28 number of loans made, the total funds committed,
29 and the amounts repaid to the Fund.

30 (4) Assessment and evaluation of the impact of the loan
31 program and its success in accomplishing the
32 purposes of this Article."

33 Sec. 2. There is appropriated from the General Fund to
34 the Department of Commerce the sum of one million dollars
35 (\$1,000,000) for the 1995-96 fiscal year for the Alternative
36 Transportations Fuel Loan Fund created in Section 1 of this act.

37 Sec. 3. Section 2 of this act becomes effective July 1,
38 1995. The remainder of this act is effective upon ratification.

SECTION-BY-SECTION ANALYSIS OF LEGISLATIVE PROPOSAL I

Section 1: Enacts new Article 3 to Chapter 113B of the General Statutes, entitled "Alternative Transportation Fuel Loan Fund." The Alternative Transportation Fuel Loan Fund is created as a revolving loan fund in the Department of Commerce. The Fund consists of funds appropriated or accruing to the Fund, contributions or grants from public or private sources, and payments on loans made from the Fund. The Fund shall be used for low-interest loans to units of local government to provide: (1) up to fifty percent (50%) of the capital cost of constructing an alternative fuel refueling or recharging facility that refuels or recharges vehicles with an alternative fuel, (2) the incremental cost of alternative fueled vehicles (AFV's) that are purchased in order to satisfy the mandates under the Energy Policy Act of 1992 (EPACT), and (3) the cost, including labor, of converting conventional vehicles to AFV's for those vehicles that are converted in order to satisfy the mandates under EPACT. For loans for an alternative fuel refueling or recharging facility, the term of the loan cannot exceed the number of years equal to seventy-five percent (75%) of the projected useful life of the facility. For loans for the purchases of and conversions to AFV's, the term of the loan cannot exceed four years. The Department of Commerce shall report annually to the Joint Legislative Commission on Governmental Operations regarding this loan program.

Section 2: One million dollars (\$1,000,000) is appropriated from the General Fund to the Department of Commerce for the Alternative Transportation Fuel Loan Fund created in Section 1 of this act.

Section 3: Section 2 becomes effective July 1, 1995. The remainder of the act is effective upon ratification.



North Carolina General Assembly

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MEMORANDUM

TO: Members, LRC on Energy Conservation
and Use of Renewable Energy Sources

FROM: Beth A. Christensen *bae*
Fiscal Research Division

DATE: December 8, 1994

RE: Preliminary Estimate of Costs
for an Alternative Fuel Loan Fund

At the request of your committee counsel, Susan Iddings, I have reviewed the draft bill creating an Alternative Fuel Loan Fund.

Because the Department of Commerce is still reviewing the draft bill to determine how the loan fund would be administered and which Commerce divisions would be involved, it is difficult to determine the cost of this proposal. The factors to consider include:

1. The workloads of staff involved with current Commerce loan funds and programs;
2. The future workloads of this staff;
3. The impact of this proposal on that workload;
4. The number of loans to be made by the proposed fund; and,
5. The size of the loans to be made by the proposed fund.

The Commerce review may determine that an additional full or part-time position would be needed to administer this proposed fund. The maximum first-year cost for this position would be \$50,000 to \$60,000.

If I can be of further assistance to the Committee, please let me know.



AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER

GENERAL ASSEMBLY OF NORTH CAROLINA

SESSION 1995

S

D

95-LDX-006(1.1)

(THIS IS A DRAFT AND NOT READY FOR INTRODUCTION)

Short Title: Alt. Fuel Facility Tax Credit.

(Public)

Sponsors: Senators Edwards, Smith, Plexico, Kerr.

Referred to:

1 A BILL TO BE ENTITLED
2 AN ACT TO GRANT A CORPORATE TAX CREDIT FOR THE CONSTRUCTION OF AN
3 ALTERNATIVE FUEL REFUELING OR RECHARGING FACILITY AND FOR
4 INSTALLATION OF REFUELING OR RECHARGING EQUIPMENT AT A
5 REFUELING OR RECHARGING FACILITY.
6 The General Assembly of North Carolina enacts:
7 Section 1. Division I of Article 4 of Chapter 105 of
8 the General Statutes is amended by adding a new section to read:
9 "§ 105-130.43. Credit for construction of an alternative fuel
10 refueling or recharging facility and for installation of
11 refueling or recharging equipment at a refueling or recharging
12 facility.
13 (a) A corporation that constructs in this State a facility for
14 refueling or recharging vehicles propelled by an alternative fuel
15 is allowed a credit against the tax imposed by this Division
16 equal to fifteen percent (15%) of the installation and equipment
17 costs of construction. Any corporation that installs equipment
18 for refueling or recharging vehicles propelled by an alternative
19 fuel, at its refueling or recharging facility located in this
20 State, is allowed a credit against the tax imposed by this
21 Division equal to fifteen percent (15%) of the installation and
22 equipment costs. The credits allowed under this section may not
23 exceed fifteen thousand dollars (\$15,000) each for the taxable
24 year. No credit is allowed to the extent that any of the costs

1 of the construction or equipment were provided by federal, State,
2 or local grants. To be eligible for the credits allowed by this
3 section, the taxpayer must own or control the facility at the
4 time of construction. The credits allowed by this section may
5 not exceed the amount of the tax imposed by this Division for the
6 taxable year reduced by the sum of all credits allowable, except
7 payments of tax made by or on behalf of the taxpayer. Any unused
8 portion of the credits may be carried over for the next
9 succeeding five years.

10 (b) As used in this section, 'alternative fuel' has the
11 meaning provided in the Energy Policy Act of 1992, 42 U.S.C. §
12 13201, et seq."

13 Sec. 2. This act is effective for taxable years
14 beginning or or after January 1, 1995.

SECTION-BY-SECTION ANALYSIS OF LEGISLATIVE PROPOSAL II

Section 1: Adds a new section G.S. 105-130.43 to Division I of Article 4 of Chapter 105 of the General Statutes. This section creates a corporate income tax credit for the construction of an alternative fuel refueling or recharging facility equal to fifteen percent (15%) of the installation and equipment costs of construction, not to exceed fifteen thousand dollars (\$15,000) for the taxable year. Also, this section creates a corporate income tax credit for the installation of refueling or recharging equipment at a refueling or recharging facility equal to fifteen percent (15%) of the installation and equipment costs, not to exceed fifteen thousand dollars (\$15,000) for the taxable year. Any unused portion of either tax credit may be carried over for the next succeeding five years. "Alternative fuel" has the meaning provided in the Energy Policy Act of 1992.

Section 2: This act is effective for taxable years beginning on or after January 1, 1995.



North Carolina General Assembly

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ESTIMATE

ANALYSIS OF ANNUALIZED COST OF EPACK

Model Year	Total Number Vehicles	Total Number Dedicated	Vehicles MSA I	Vehicles MSA II	Vehicles MSA III	Additional Vehicle Costs	Facility Cost Range \$120K-\$150K
1996	3,004	77	51	9	17	\$315,055	\$378-\$473
1997	3,774	145	96	17	32	\$591,343	\$133-\$167
1998	4,740	303	201	36	67	\$1,237,683	\$293-\$367
1999	5,954	762	504	91	167	\$3,112,099	\$503-\$583
2000	7,478	1,436	949	172	315	\$7,064,018	\$78-\$97

Source: Alternative Fuels Study; March 2, 1993

Cost - All cost based on compressed natural gas as the alternative fuel.

Areas Currently Affected:

- * Charlotte, Gastonia, Rock Hill: MSA III
 - * Greensboro, Winston-Salem, High Point: MSA II
 - * Raleigh, Durham, Chapel Hill: MSA I
- MSA - Mean Statistical Area

* DRAFT 4: Alternative Fuel Facility Tax Credit

The impact, on the State's General Fund, from allowing corporations a corporate income tax credit equal to 15% of the installation and equipment cost to construct an alternative fuel refueling or recharging facility is not expected to exceed \$45,000 in tax year 1996. Between tax years 1997 and 2000 a maximum of 7 credits is expected.

DRAFTS 5 & 6: Fuel Tax for Alternative Fuels

The Department of Revenue expects the revenue loss to be insignificant, over the next two years, if the motor fuels tax were eliminated for alternative transportation fuels. (Insignificant - less than \$100,000 annually)

*** Fiscal information regarding Legislative Proposal II**



Clean Air Act Amendments of 1990
and the Energy Policy Act of 1992

I. Comparative Alternative/ Clean Fuels Provision, EFACT

a. Alternative Fuels

1. Methanol
2. Ethanol
3. Other alcohols, separately or in mixtures of 85% or more but not less than 70% by volume mixed with gasoline.
4. Compressed natural gas (CNG)
5. Liquefied petroleum gas (LPG)
6. Hydrogen
7. Coal derived liquids
8. Fuels derived from biological materials
9. Other fuels - substantially not petroleum yielding energy security benefits

II. Alternative Fuel Vehicle Purchasing Requirements
Metro Area purchases of light duty vehicles

YEAR	STATE	Percent of "New" Vehicle Purchases	
		(Early Rule) MUNIC/PRIV	(Late Rule) MUNIC/PRIV
1996	10%		
1997	15		
1998	25		
1999	50	20%	
2000	75	20	
2001	75	20	
2002	75	30	20%
2003	75	40	40
2004	75	50	60
2005	75	60	70
2006	75	70	70

Metro Area - A metro or mean statistical area as defined by the 1980 Census as having a population of at least 250,000.

Fleets - 20 or more light-duty vehicles, capable of being centrally fueled that are owned, operated, leased, or controlled by a governmental entity or by another person who controls 50 or more vehicles light duty vehicles.

Light duty vehicle - Less than 8,500 lb. gross vehicle weight

State Exemptions

1. If vehicles are not available
2. If alternative fuel source is not available
3. Poses an unreasonable financial hardship.

GENERAL ASSEMBLY OF NORTH CAROLINA

SESSION 1995

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95-LDX-005Y(1.1)

(THIS IS A DRAFT AND NOT READY FOR INTRODUCTION)

Short Title: Fuel Tax for Alternative Fuels.

(Public)

Sponsors: Representatives Brawley, Bowen, McLaughlin, Robinson.

Referred to:

1 A BILL TO BE ENTITLED
2 AN ACT TO REDUCE THE MOTOR FUEL TAX FOR ALTERNATIVE
3 TRANSPORTATION FUELS.
4 The General Assembly of North Carolina enacts:
5 Section 1. Article 36 of Chapter 105 of the General
6 Statutes is amended by adding a new section to read:
7 "§ 105-436.2. Taxation on alcohol fuels.
8 Sale, distribution, or use of methanol, denatured ethanol, or
9 other alcohols, or mixtures containing at least seventy percent
10 (70%) by volume of methanol, denatured ethanol, and other
11 alcohols with gasoline or other fuels, used to propel a vehicle
12 on the highways of this State, is subject to the tax under G.S.
13 105-434 except the tax is twelve cents (12¢)."
14 Sec. 2. G.S. 105-449.16 reads as rewritten:
15 "§ 105-449.16. Levy of tax and application of tax proceeds.
16 (a) A tax is imposed upon all of the following fuel:
17 (1) Fuel sold or delivered by a supplier to a licensed
18 user-seller.
19 (2) Fuel used by a supplier in a motor vehicle owned,
20 leased, or operated by the supplier.
21 (3) Fuel delivered by a supplier directly into the fuel
22 supply tank of a motor vehicle.
23 (4) Fuel imported by a user-seller into this State, by
24 a means other than carrying the fuel in a fuel

1 supply tank of a motor vehicle, for resale or to
2 operate a motor vehicle.

3 (5) Fuel acquired tax free by a user-seller or user in
4 this State for resale or to operate a motor
5 vehicle.

6 The tax on liquid fuel that is not an alternative fuel is at
7 the rate established under G.S. 105-434. The tax on liquid
8 alternative fuel is twelve cents (12¢). The tax on non-liquid
9 fuel is at a rate equivalent to the rate of tax on liquid fuel,
10 as determined by the Secretary. A supplier who consigns fuel to a
11 reseller may elect to report and pay the tax due on the fuel when
12 the reseller sells or dispenses the fuel instead of when the
13 supplier delivers the fuel to the reseller.

14 The primary purposes of this levy and this Article are to
15 provide a more efficient and effective method of collecting the
16 tax now imposed and collected pursuant to G.S. 105-435, by
17 providing for the collection of the tax from the supplier instead
18 of the user. The tax levied by this Article is in lieu of rather
19 than in addition to the tax levied by G.S. 105-435; payment of
20 the tax levied by this Article constitutes compliance with G.S.
21 105-435.

22 (b) The same percentage amounts of revenue collected under
23 this Article shall be credited to the Highway Fund and to the
24 Highway Trust Fund as are credited to those Funds under G.S. 105-
25 445, and the same percentage amounts of refunds allowed under
26 this Article shall be charged to the Highway Fund and to the
27 Highway Trust Fund as are charged to those Funds under that
28 statute.

29 (c) Expired.

30 (d) As used in this section, 'alternative fuel' has the
31 meaning provided in the Energy Policy Act of 1992, 42 U.S.C. §
32 13201, et seq., except alternative fuel does not include
33 methanol, denatured ethanol, and other alcohols, or mixtures
34 containing at least seventy percent (70%) by volume of methanol,
35 denatured ethanol, and other alcohols with gasoline or other
36 fuels."

37 Sec. 3. G.S. 105-435(a) reads as rewritten:

38 "(a) Every person who owns or operates over the highways of
39 this State, any motor vehicle ~~propelled by a motor which that~~
40 uses any product for propulsion not included within the
41 definition of 'motor fuels' ~~hereinbefore set out~~ provided in G.S.
42 105-430, to generate power for the propulsion of ~~said the~~
43 vehicle, shall pay to the Secretary of Revenue, for the use of
44 the highways of this State, a tax at the rate ~~established~~

1 ~~pursuant to~~ provided in G.S. 105-434(a) on the ~~fuel used in such~~
2 ~~vehicle upon the highways of this State.~~ fuel."

3 Sec. 4. This act is effective for taxable years
4 beginning on or after January 1, 1995.

SECTION-BY-SECTION ANALYSIS OF LEGISLATIVE PROPOSAL III

Section 1: Adds new section G. S. 105-43 to Article 36 of Chapter 105 of the General Statutes on the Gasoline Tax. This new section establishes a reduced motor fuel tax rate of 12 cents for alcohol fuels used in vehicles operated on highways when the alcohol fuel consists of at least 70% alcohol mixed with, at most, 30% gasoline.

Section 2: Amends G. S. 105-449.16 in Article 36A of Chapter 105 of the General Statutes regarding the Special Fuels Tax. This amendment sets a reduced tax rate for those special fuels that are alternative fuels. Alternative fuels are defined as having the same meaning for "alternative fuels" provided in the Energy Policy Act of 1992, 42 U.S.C. § 13201, et seq., except alternative fuels does not include, for purposes of this section, ethanol, gasohol, or methanol.

Section 3: Amends G. S. 105-435(a) to provide that the motor fuel tax applies to any vehicle operated on the highways. By repealing in subsection (a) the language "propelled by a motor", the tax will apply now to electric vehicles. (Electric vehicles are not propelled by a motor, but are propelled by a battery.)

Section 4: This act is effective for taxable years beginning on or after January 1, 1995.



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ESTIMATE

ANALYSIS OF ANNUALIZED COST OF EPACK

Model Year	Total Number Vehicles	Total Number Dedicated	Vehicles MSA I	Vehicles MSA II	Vehicles MSA III	Additional Vehicle Costs	Facility Cost Range \$120K-\$150K
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Source: Alternative Fuels Study; March 2, 1993

Cost - All cost based on compressed natural gas as the alternative fuel.

Areas Currently Affected:

- * Charlotte, Gastonia, Rock Hill: MSA III
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 - * Raleigh, Durham, Chapel Hill: MSA I
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The impact, on the State's General Fund, from allowing corporations a corporate income tax credit equal to 15% of the installation and equipment cost to construct an alternative fuel refueling or recharging facility is not expected to exceed \$45,000 in tax year 1996. Between tax years 1997 and 2000 a maximum of 7 credits is expected.

DRAFT 5: Fuel Tax for Alternative Fuels

The Department of Revenue expects the revenue loss to be insignificant, over the next two years, if the motor fuels tax were eliminated for alternative transportation fuels.
(Insignificant - less than \$100,000 annually)

*** Fiscal Information regarding Legislative Proposal III**



Clean Air Act Amendments of 1990
and the Energy Policy Act of 1992

I. Comparative Alternative/ Clean Fuels Provision, EPACT

a. Alternative Fuels

1. Methanol
2. Ethanol
3. Other alcohols, separately or in mixtures of 85% or more but not less than 70% by volume mixed with gasoline.
4. Compressed natural gas (CNG)
5. Liquefied petroleum gas (LPG)
6. Hydrogen
7. Coal derived liquids
8. Fuels derived from biological materials
9. Other fuels - substantially not petroleum yielding energy security benefits

II. Alternative Fuel Vehicle Purchasing Requirements
Metro Area purchases of light duty vehicles

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1998	25		
1999	50	20%	
2000	75	20	
2001	75	20	
2002	75	30	20%
2003	75	40	40
2004	75	50	60
2005	75	60	70
2006	75	70	70

Metro Area - A metro or mean statistical area as defined by the 1980 Census as having a population of at least 250,000.

Fleets - 20 or more light-duty vehicles, capable of being centrally fueled that are owned, operated, leased, or controlled by a governmental entity or by another person who controls 50 or more vehicles light duty vehicles.

Light duty vehicle $\frac{1}{2}$ Less than 8,500 lb. gross vehicle weight

State Exemptions

1. If vehicles are not available
2. If alternative fuel source is not available
3. Poses an unreasonable financial hardship.

GENERAL ASSEMBLY OF NORTH CAROLINA

SESSION 1995

S

D

95-LDX-013(1.1)

(THIS IS A DRAFT AND NOT READY FOR INTRODUCTION)

Short Title: State Energy Policy.

(Public)

Sponsors: Senators Edwards, Plexico, Kerr, Smith.

Referred to:

1 A BILL TO BE ENTITLED
 2 AN ACT TO ESTABLISH THE STATE FACILITIES ENERGY CONSERVATION
 3 PROGRAM; TO AUTHORIZE THE DEPARTMENT OF ADMINISTRATION TO ENTER
 4 INTO ALTERNATIVE FINANCING AGREEMENTS FOR THE PURCHASE OF
 5 ENERGY CONSERVATION PROJECTS; AND TO AUTHORIZE THE ISSUANCE OF
 6 BONDS THAT ARE SECURED BY AN INTEREST IN THE PROPERTY
 7 PURCHASED.

8 Whereas, energy conservation projects that substantially
 9 reduce energy use provide an opportunity to save large sums of
 10 money by reducing utility bills; and

11 Whereas, energy conservation projects that substantially
 12 reduce energy use benefit the environment by slowing the
 13 depletion of nonrenewable energy sources, by lessening the need
 14 to construct more power plants, and reducing harmful emissions
 15 and other negative side effects of energy use that harm the
 16 environment and the health of the public; and

17 Whereas, the State should take a leadership role in
 18 energy conservation; and

19 Whereas, the positive impact on the State's budget and
 20 the positive impact on the environment compel the State to
 21 implement energy conservation projects in State facilities; Now,
 22 therefore,

23 The General Assembly of North Carolina enacts:

24 Section 1. G.S. 143-341(4) reads as rewritten:

1 "(4) Real Property Control:

- 2 a. To prepare and keep current a complete and
3 accurate inventory of all land owned or leased
4 by the State or by any State agency. This
5 inventory shall show the location, acreage,
6 description, source of title and current use
7 of all land (including swamplands or
8 marshlands) owned by the State or by any State
9 agency, and the agency to which each tract is
10 currently allocated. Surveys may be made where
11 necessary to obtain information for the
12 purposes of this inventory. Accurate plats or
13 maps of all such land may be prepared, or
14 copies obtained where such maps or plats are
15 available.
- 16 b. To prepare and keep current a complete and
17 accurate inventory of all buildings owned or
18 leased (in whole or in part) by the State or
19 by any State agency. This inventory shall show
20 the location, amount of floor space and floor
21 plans of every building owned or leased by the
22 State or by any State agency, and the agency
23 to which each building, or space therein, is
24 currently allocated. Floor plans of every such
25 building shall be prepared or copies obtained
26 where such floor plans are available, where
27 needed for use in the allocation of space
28 therein.
- 29 c. To obtain and deposit with the Secretary of
30 State the originals of all deeds and other
31 conveyances of real property to the State or
32 to any State agency, copies of all leases
33 wherein the State or any State agency is
34 lessor or lessee, and certified copies of
35 wills, judgments, and other instruments
36 whereby the State or any State agency has
37 acquired title to real property. Where an
38 original of a deed, lease, or other instrument
39 cannot be found, but has been recorded in the
40 registry of office of the clerk of superior
41 court of any county, a certified copy of such
42 deed, conveyance, or instrument shall be
43 obtained and deposited with the Secretary of
44 State.

1 d. To acquire, whether by purchase, exercise of
2 the power of eminent domain, lease, or rental,
3 all land, buildings, and space in buildings
4 for all State agencies, subject to the
5 approval of the Governor and Council of State
6 in each instance. The Governor, acting with
7 the approval of the Council of State, may
8 adopt rules (i) exempting from any or all of
9 the requirements of this paragraph such
10 classes of lease, rental, easement, and
11 right-of-way transactions as he deems
12 advisable; and (ii) authorizing any State
13 agency to enter into and/or approve the
14 classes of transactions thus exempted from the
15 requirements of this paragraph; and (iii)
16 delegating to any other State agency the
17 authority to approve the severance of
18 buildings and standing timber from State
19 lands; upon such approval of severance, the
20 buildings and timber so affected shall be
21 treated, for the purposes of this Chapter, as
22 personal property. Any contract entered into
23 or any proceeding instituted contrary to the
24 provisions of this paragraph is voidable in
25 the discretion of the Governor and Council of
26 State.

27 d1. To require all State departments,
28 institutions, and agencies to use State-owned
29 office space instead of negotiating or
30 renegotiating leases for rental of office
31 space. Any lease entered into contrary to the
32 provisions of this paragraph is voidable in
33 the discretion of the Governor and the Council
34 of State.

35 The Department of Administration shall
36 report to the Joint Legislative Commission on
37 Governmental Operations and to the Fiscal
38 Research Division no later than May 1 of each
39 year on leased office space.

40 d2. To finance the cost of modification,
41 rehabilitation, renovation, or improvement of
42 existing buildings or facilities, or the
43 acquisition and installation of fixtures or
44 equipment in existing buildings or facilities,

1 or any combination of the foregoing pursuant
2 to an energy conservation project under Part 3
3 of Article 3B of Chapter 143 of the General
4 Statutes, through installment purchase, lease
5 purchase, or other similar installment
6 financing agreements or the issuance of bonds
7 of the State in the manner and to the extent
8 set forth in Article 8 of Chapter 142 of the
9 General Statutes.

- 10 e. To make all sales of real property (including
11 marshlands or swamplands) owned by the State
12 or by any State agency, with the approval of
13 the Governor and Council of State in each
14 instance. All conveyances in fee by the State
15 shall be executed in accordance with the
16 provisions of G.S. 146-74 through 146-78. Any
17 conveyance of land made or contract to convey
18 land entered into without the approval of the
19 Governor and Council of State is voidable in
20 the discretion of the Governor and Council of
21 State. The proceeds of all sales of swamplands
22 or marshlands shall be dealt with in the
23 manner required by the Constitution and
24 statutes.
- 25 f. With the approval of the Governor and Council
26 of State, to make all leases and rentals of
27 land or buildings owned by the State or by any
28 State agency, and to sublease land or
29 buildings leased by the State or by any State
30 agency from another owner, where such land or
31 building owned or leased by the State or by
32 any State agency is not needed for current
33 use. The Governor, acting with the approval of
34 the Council of State, may adopt rules (i)
35 exempting from any or all of the requirements
36 of this paragraph such classes of lease or
37 rental transactions as he deems advisable; and
38 (ii) authorizing any State agency to enter
39 into and/or approve the classes of
40 transactions thus exempted from the
41 requirements of this paragraph; and (iii)
42 delegating to any other State agency the
43 authority to approve the severance of
44 buildings and standing timber from State

- 1 lands; upon such approval of severance, the
2 buildings and timber so affected shall be
3 treated, for the purposes of this Chapter, as
4 personal property. Any lease or rental
5 agreement entered into contrary to the
6 provisions of this paragraph is voidable in
7 the discretion of the Governor and Council of
8 State.
- 9 g. To allocate and reallocate land, buildings,
10 and space in buildings to the several State
11 agencies, in accordance with rules adopted by
12 the Governor with the approval of the Council
13 of State; provided that if the proposed
14 reallocation is of land with an appraised
15 value of at least twenty-five thousand dollars
16 (\$25,000), the reallocation may only be made
17 after consultation with the Joint Legislative
18 Commission on Governmental Operations. The
19 authority granted in this paragraph shall not
20 apply to the State Legislative Building and
21 grounds or to the Legislative Office Building
22 and grounds.
- 23 h. To require any State agency to make reports
24 regarding the land and buildings owned by it
25 or allocated to it at such times and in such
26 form as the Department may deem necessary.
- 27 i. To determine whether all deeds, judgments, and
28 other instruments whereby title to real estate
29 has been or may be acquired by the State or by
30 any State agency have been properly recorded
31 in the county wherein the real property is
32 situated, and to make or cause to be made
33 proper recordation of such instruments. The
34 Department may have previously recorded
35 instruments which conveyed title to or from
36 the State or any State agency or officer
37 reindexed, where necessary, to show the State
38 of North Carolina or grantor or grantee, as
39 the case may be, and the cost of such
40 reindexing shall be paid from the State Land
41 Fund.
- 42 j. To call upon the Attorney General for advice
43 and assistance in the performance of any of
44 the foregoing duties.

- 1 k. None of the provisions of this subdivision
2 apply to highway or railroad rights-of-way or
3 other interests or estates in land held for
4 the same or similar purposes, or to the
5 acquisition or disposition of such
6 rights-of-way, interests, or estates in land.
- 7 l. To manage and control the vacant and
8 unappropriated lands, swamplands, lands
9 acquired by the State by virtue of being sold
10 for taxes, and submerged lands of the State,
11 pursuant to Chapter 146 of the General
12 Statutes.
- 13 m. To contract for or approve all contracts for
14 all appraisals and surveys of real property
15 for all State agencies; provided, however,
16 this provision shall not apply to appraisals
17 and surveys obtained in connection with the
18 acquisition of highway rights-of-way, borrow
19 pits, or other interests or estates in land
20 acquired for the same or similar purposes, or
21 to the disposition thereof, by the Board of
22 Transportation.
- 23 n. To petition for the annexation of state-owned
24 lands into any municipality."

25 Sec. 2. Article 3B of Chapter 143 of the General
26 Statutes is amended by adding a new Part to read:

27 "Part 3. State Facilities Energy Conservation Program.

28 "§ 143-64.18. Definitions.

29 As used in this Part:

- 30 (1) 'Energy Division' means the Energy Division of the
31 Department of Commerce.
- 32 (2) 'Energy conservation project' has the same meaning
33 as set forth in G.S. 142-62.
- 34 (3) 'Implementation cost' means cost as defined in G.S.
35 142-62(6) plus the interest on special indebtedness
36 incurred pursuant to Article 8 of Chapter 142 of
37 the General Statutes to finance the project.
- 38 (4) 'State facility' means a building owned by the
39 State or a group of buildings owned by the State
40 which are served by a central energy distribution
41 system or by components of a central energy
42 distribution system.
- 43 (5) 'Technical analysis' means a specialized
44 engineering study conducted within a State facility

1 to identify specific energy conservation projects,
2 the implementation costs of these projects, and the
3 expected energy and energy savings and energy cost
4 savings after implementation.

5 "§ 143-64.18A. State Facilities Energy Conservation Program.

6 (a) The General Assembly finds that:

7 (1) State government should take a leadership role in
8 aggressively undertaking energy conservation in
9 North Carolina.

10 (2) After the implementation cost of the energy
11 conservation project is paid, the State will save
12 substantial sums of money in reduced utility bills.

13 (3) The actual energy savings that result from an
14 energy conservation project should offset, in whole
15 or in part, the implementation cost of the energy
16 conservation project.

17 (4) The State should undertake only those energy
18 conservation projects that are projected to require
19 less than an aggregate of six years for the
20 recoupment of the implementation cost based on the
21 projected energy cost savings from implementing the
22 energy conservation project, and the term of the
23 financing should not exceed the expected economic
24 life of the energy conservation project being
25 financed.

26 (5) The State should give highest priority to those
27 energy conservation projects that are projected to
28 require less than an aggregate of two years for the
29 recoupment of the implementation cost of the energy
30 conservation project based on the projected energy
31 cost savings of the improvement.

32 (6) It is in the best interest of the State to
33 authorize financing of energy conservation projects
34 pursuant to Article 8 of Chapter 142 of the General
35 Statutes.

36 (b) The State Facilities Energy Conservation Program is
37 established to more efficiently use energy resources in State
38 facilities and to reduce the utility costs of the State. The
39 Energy Division shall develop, administer, and coordinate the
40 State Facilities Energy Conservation Program.

41 (c) The State Facilities Energy Conservation Program shall
42 assist State agencies as follows:

43 (1) Serve as a source of technical support for energy
44 conservation management.

- 1 (2) Identify sources of moneys for conducting technical
2 analyses pursuant to G.S. 143-64.18C.
- 3 (d) The Energy Division shall:
- 4 (1) When necessary to carry out its duties under this
5 Part, enter into contracts with State agencies and
6 other qualified contractors.
- 7 (2) Promulgate rules necessary to carry out the
8 provisions of this Article.
- 9 (3) Provide criteria for the selection of State
10 projects or facilities to participate in this
11 Program and develop a format that comports with
12 these criteria.
- 13 (4) Develop procedures for the technical analyses
14 required under G.S. 143-64.18C and procedures for
15 implementing energy conservation projects.
- 16 (5) Select, in order of priority and in consultation
17 with the Department of Administration, State
18 projects or facilities to participate in this
19 Program.
- 20 (6) Assess energy conservation program savings.
- 21 (7) Be responsible for considering the costs of the
22 constituent fixtures or improvements over their
23 economic life during the selection of projects or
24 facilities to participate in this Program.

25 **§ 143-64.18B. Energy Technical Analysis Loan Fund.**

26 (a) The Energy Technical Analysis Loan Fund is created. This
27 Fund shall be a nonreverting revolving loan fund to be
28 administered by the Energy Division. This Fund shall consist of
29 moneys appropriated or allocated to it by the General Assembly
30 and any grants, fees, or other moneys paid to it. The interest
31 accruing to the Fund shall be credited to the Fund.

32 (b) The Energy Technical Analysis Loan Fund may be used for
33 State departments, institutions, or agencies for the cost of
34 conducting a technical analysis under G.S. 143-64.18C. The State
35 department, institution, or agency for which the technical
36 analysis was conducted shall repay the Fund within 60 days of
37 receiving financing to implement an energy conservation project
38 or within 180 days of determining that no energy conservation
39 project will be implemented under this Part.

40 **§ 143-64.18C. Identification and implementation of energy**
41 **conservation projects.**

42 (a) Each State project or facility that is selected shall
43 undergo a technical analysis conducted by an engineer qualified
44 to conduct such analysis. When the Energy Division enters into a

1 contract with a State agency whereby the State agency is to
2 select and contract with an engineer to conduct the technical
3 analysis of the agency's facilities, the State agency shall
4 select the engineer within 60 days of entering into the contract
5 with the Energy Division. The Energy Division, in consultation
6 with the Department of Administration, shall review all completed
7 technical analyses. If the Energy Division does not approve a
8 technical analysis, the energy conservation project shall not be
9 implemented.

10 (b) Only those energy conservation projects identified by the
11 technical analysis that are economically practical and that are
12 projected not to require more than an aggregate of six years for
13 the recoupment through energy cost savings of the estimated
14 implementation cost of the improvements may be implemented.
15 Those energy conservation projects identified by the technical
16 analysis that are projected to not require more than an aggregate
17 of two years for the recoupment of the estimated implementation
18 cost of the improvements shall be given priority.

19 (c) Selected energy conservation projects may be financed
20 pursuant to Article 8 of Chapter 142 of the General Statutes only
21 with the prior written consent of the State agency receiving the
22 benefit of the energy conservation project to be financed.

23 (d) The Energy Division shall notify the Joint Legislative
24 Commission on Governmental Operations of any energy conservation
25 project having a construction cost greater than five thousand
26 dollars (\$5,000) prior to executing the financing documents.

27 (e) Selection of a designer for an energy conservation project
28 shall occur within 60 days of the Office of State Budget and
29 Management certifying the availability of funds for the project.

30 "§ 143-64.18D. Grants; appropriations.

31 Moneys appropriated by the General Assembly and any grants,
32 fees, or other moneys provided for the purpose of funding the
33 cost of an energy conservation project shall be applied to pay
34 the cost of implementing such project, including the technical
35 analysis conducted in accordance with G.S. 143-64.18C, in a
36 manner consistent with the provisions of Article 8 of Chapter 142
37 of the General Statutes.

38 "§ 143-64.18E. Additional reporting requirements.

39 The Energy Division shall report on a quarterly basis to the
40 Joint Legislative Commission on Governmental Operations. This
41 report shall include:

42 (1) The technical analyses conducted in the previous
43 quarter, including the location of the State

- 1 facilities subject to the analyses and the results
2 of the analyses.
- 3 (2) The estimated implementation cost of each proposed
4 project, the projected energy savings, and the
5 projected payback period for each energy
6 conservation project.
- 7 (3) The energy conservation projects that were
8 initiated during the previous quarter, the terms of
9 the financing, and the progress to date.
- 10 (4) The energy conservation projects that were
11 completed during the previous quarter, including
12 the actual cost of constructing each energy
13 conservation project.
- 14 (5) The financings that were fully paid during the
15 previous quarter, including the amount of time
16 required for the implementation cost of each energy
17 conservation project to be recouped, based on the
18 energy savings of the project.
- 19 (6) Any other information requested by the Commission.

20 "§ 143-64.18F. Scope of this Part.

21 The provisions of this Part apply to all State facilities,
22 including facilities in the University of North Carolina System
23 and State hospitals."

24 Sec. 3. Article 8 is added to Chapter 142 of the
25 General Statutes to read as follows:

26 "ARTICLE 8.

27 "Energy Conservation Projects Finance Act.

28 "§ 142-60. Short title.

29 This Article may be cited as the State Energy Conservation
30 Projects Finance Act.

31 "§ 142-61. Findings and purpose.

32 The General Assembly hereby finds as follows:

- 33 (1) Energy conservation projects that substantially
34 reduce energy use provide an opportunity to save
35 large sums of money by reducing utility bills.
- 36 (2) Energy conservation projects that substantially
37 reduce energy use benefit the environment by
38 slowing the depletion of nonrenewable energy
39 sources, by lessening the need to construct more
40 power plants, and by reducing harmful emissions and
41 other negative side effects of energy use that harm
42 the environment and the health of the public.
- 43 (3) The State should take a leadership role in energy
44 conservation.

1 (4) The positive impact on the State's budget and the
2 positive impact on the environment compel the State
3 to implement energy conservation projects in State
4 facilities.

5 "§ 142-62. Definitions.

6 Unless a different meaning is required by the context, the
7 following definitions shall apply throughout this Article:

8 (1) 'Alternative financing agreement' means an
9 agreement entered into pursuant to the provisions
10 of this Article to finance an energy conservation
11 project, including a lease-purchase agreement, an
12 installment-purchase agreement, or any other
13 similar installment-financing agreements, but does
14 not include a contract:

- 15 a. Constituting an operating lease under
16 generally accepted accounting principles;
17 b. Providing for the payment thereunder over its
18 full term, including periods that may be added
19 to the original term through the exercise of
20 options to renew or extend, of an aggregate
21 principal amount not in excess of five
22 thousand dollars (\$5,000) or such greater
23 amount as may be established by the Council of
24 State, in the event that the Council of State
25 determines (i) the aggregate amount to be paid
26 under such contracts will not have a
27 significant impact on the State budgetary
28 process or the economy of the State and (ii)
29 such change will lessen the administrative
30 burden on the State; or

31 c. That is executed and provides for the making
32 of all payments thereunder, including payment
33 to be made during any period that may be added
34 to the original term through the exercise of
35 options to renew or extend, in the same fiscal
36 year

37 that does not create a security interest in real
38 property owned by the State.

39 (2) 'Alternative financing agreement indebtedness'
40 means indebtedness incurred under an alternative
41 financing agreement, including certificates of
42 participation indebtedness.

- 1 (3) 'Bonded indebtedness' means bonds and bond
2 anticipation notes, including refunding bonds and
3 notes, authorized to be issued under this Article.
- 4 (4) 'Certificates of participation' means certificates
5 or other instruments delivered by a special
6 corporation evidencing the assignment of
7 proportionate undivided interests in rights to
8 receive payments pursuant to an alternative
9 financing agreement.
- 10 (5) 'Certificates of participation indebtedness' means
11 alternative financing agreement indebtedness
12 incurred by the State under a plan of finance in
13 which a special corporation obtains funds to pay
14 the cost of an energy conservation project to be
15 financed through the delivery by such special
16 corporation of certificates of participation.
- 17 (6) 'Cost' includes, but is not limited to:
- 18 a. The cost of construction, modification,
19 rehabilitation, renovation, improvement,
20 acquisition, or installation in connection
21 with an energy conservation project;
- 22 b. The cost of engineering, architectural, and
23 other consulting services as may be required,
24 including the cost of performing the technical
25 analysis in accordance with G.S. 143-64.18C;
- 26 c. Finance charges, reserves for debt service,
27 and interest prior to and during construction,
28 and, if deemed advisable by the State
29 Treasurer, for a period not exceeding two
30 years after the estimated date of completion
31 of construction;
- 32 d. Administrative expenses and charges;
- 33 e. The cost of bond insurance, investment
34 contracts, credit and liquidity facilities,
35 interest rate swap agreements, and other
36 derivative products, financial and legal
37 consultants, and related costs of the
38 incurrence or issuance of special
39 indebtedness, to the extent and as determined
40 by the State Treasurer;
- 41 f. The cost of reimbursing the State for payments
42 made for any costs described in this
43 subdivision; and

- 1 g. Any other costs and expenses necessary or
2 incidental to implementing the purposes of
3 this Article.
- 4 (7) 'Credit facility' means an agreement entered into
5 by the State Treasurer or a special corporation on
6 behalf of the State with a bank, savings and loan
7 association, or other banking institution; an
8 insurance company, reinsurance company, surety
9 company, or other insurance institution; a
10 corporation, investment banking firm, or other
11 investment institution; or any financial
12 institution or other similar provider of a credit
13 facility, which provider may be located within or
14 without the United States of America; such
15 agreement providing for prompt payment of all or
16 any part of the principal or purchase price
17 (whether at maturity, presentment or tender for
18 purchase, redemption, or acceleration), redemption
19 premium, if any, and interest on any special
20 indebtedness payable on demand or tender by the
21 owner in consideration of the State agreeing to
22 repay the provider of the credit facility in
23 accordance with the terms and provisions of such
24 agreement.
- 25 (8) 'Department of Administration' means the North
26 Carolina Department of Administration, or should
27 the Department be abolished or otherwise divested
28 of its functions under this Article, the public
29 body succeeding it in its principal functions, or
30 upon which are conferred by law the rights, powers,
31 and duties given by this Article to the Department.
- 32 (9) 'Energy conservation project' includes:
33 a. Any modification, rehabilitation, renovation,
34 or improvement of existing State facilities;
35 b. Any acquisition and installation of fixtures
36 or equipment in existing State facilities; or
37 c. Any combination of the foregoing
38 that is intended to reduce energy costs or
39 consumption or to allow the use of an alternative
40 energy source and that may include integral control
41 and measurement devices.
- 42 (10) 'Fiscal year' means the fiscal year of the State
43 beginning on July 1 of each calendar year and
44 ending on June 30 of the next calendar year.

- 1 (11) 'Par formula' means any provision or formula
2 adopted by the State to provide for the adjustment,
3 from time to time, of the interest rate or rates
4 borne or provided for by any special indebtedness,
5 including:
6 a. A provision providing for such adjustment so
7 that the special indebtedness in the open
8 market would be as close to par as possible;
9 b. A provision providing for such adjustment
10 based upon a percentage or percentages of a
11 prime rate or base rate, which percentage or
12 percentages may vary or be applied for
13 different periods of time; or
14 c. Such other provision as the State Treasurer
15 may determine to be consistent with this
16 Article and will not materially and adversely
17 affect the financial position of the State and
18 the marketing of special indebtedness at a
19 reasonable interest cost to the State.
20 (12) 'Special corporation' means a nonprofit corporation
21 created under Chapter 55A of the General Statutes
22 for the purpose of facilitating the incurrence of
23 certificates of participation indebtedness by the
24 State under this Article or any private corporation
25 or other entity issuing certificates of
26 participation pursuant to this Article.
27 (13) 'Special indebtedness' means alternative financing
28 agreement indebtedness and bonded indebtedness.
29 (14) 'State' means the State of North Carolina.
30 (15) 'State agency' means every agency, institution,
31 board, commission, bureau, council, department,
32 division, officer, and employee of the State, but
33 does not mean counties, municipal corporations,
34 political subdivisions, county and city boards of
35 education, and other local public bodies.
36 (16) 'State facility' means State facility as defined in
37 G.S. 143-64.18.
38 (17) 'State Treasurer' means the incumbent Treasurer,
39 from time to time, of the State.
40 "§ 142-63. Authorization of special indebtedness.
41 The State may enter into, incur, or issue special indebtedness
42 subject to the terms and conditions set forth in this Article for
43 the purpose of financing the cost of energy conservation projects

1 in a principal amount not to exceed thirty million dollars
2 (\$30,000,000) at any one time.

3 "§ 142-64. Procedure for incurrence or issuance of special
4 indebtedness.

5 (a) Any State agency or the Energy Division, with the prior
6 written consent of the State agency, shall contact the Department
7 of Administration whenever such State agency intends to use
8 special indebtedness to finance an energy conservation project.
9 If the Department of Administration intends to use special
10 indebtedness to finance such capital facilities, it shall provide
11 written notice to the State Treasurer advising the State
12 Treasurer of its proposed intent. The State Treasurer may
13 require a preliminary conference with the Department of
14 Administration to consider the proposed financing.

15 After the filing of such notice and after such preliminary
16 conference if one is required, the State Treasurer shall consult
17 with the Office of State Budget and Management as to the revenues
18 expected by said Office to be available to pay all sums to come
19 due on such special indebtedness during the term thereof. If,
20 after consulting with the Office of State Budget and Management,
21 the State Treasurer determines by written certificate that it may
22 be desirable to use special indebtedness to finance such capital
23 facilities, the Department of Administration shall request the
24 Council of State to give its preliminary approval of the use of
25 special indebtedness to finance such capital facilities. Copies
26 of the notice and certificate required by this subsection (a) of
27 this section shall be filed promptly with the Council of State.

28 (b) The Council of State, upon receipt of the items required
29 by subsection (a) of this section, shall adopt a resolution
30 granting or denying preliminary approval of such financing. A
31 resolution granting preliminary approval may include such other
32 terms, conditions, and restrictions as the Council of State may
33 deem necessary or desirable.

34 (c) Council of State approval.

35 (1) Before any special indebtedness shall be incurred
36 or issued pursuant to this Article, the Council of
37 State shall authorize by resolution:

38 a. The providing of a particular energy
39 conservation project or, in general terms, the
40 types or classifications of energy
41 conservation projects to be provided, and

42 b. The aggregate principal amount of such special
43 indebtedness or maximum principal amount
44 thereof, the maturity or maximum maturity

1 thereof and the interest rate or rates (or the
2 equivalent thereof) or maximum rate thereof of
3 the special indebtedness to be incurred or
4 issued therefor.

5 Such resolution shall include such other matters as
6 the Council of State may determine including,
7 without limitation, the adoption or approval of
8 documentation providing for the incurrence or
9 issuance and sale of special indebtedness and the
10 making of such determinations or the granting of
11 such consents or approvals as may be authorized in
12 G.S. 142-68 and G.S. 142-69.

13 (2) If the Council of State authorizes in general terms
14 the types or classifications of energy conservation
15 projects to be financed, then the particular energy
16 conservation projects and the principal amount of
17 special indebtedness to be incurred or issued for
18 each particular energy conservation project shall
19 be determined by the Department of Administration
20 after considering such factors as the Department
21 shall deem relevant in order to determine that the
22 particular energy conservation project to be
23 provided is desirable for the efficient operation
24 of the State and its agencies and is in the best
25 interest of the State.

26 (3) In the discretion of the Council of State, the
27 resolution required by subsection (b) of this
28 section and the resolution required by subdivision
29 (1) of this subsection may be adopted at the same
30 time as one resolution.

31 (d) No special indebtedness shall be incurred or issued
32 without the prior written approval of the State Treasurer. In
33 determining whether such proposed financing shall be approved,
34 the State Treasurer may consider such factors as the State
35 Treasurer shall deem relevant in order to find and determine
36 that:

37 (1) The amounts to become due under the special
38 indebtedness, including the interest component, are
39 not excessive for the purpose proposed;

40 (2) The increase, if any, in State revenues, including
41 taxes, necessary to pay the sums to become due
42 under the special indebtedness are not excessive;
43 and

1 (3) The special indebtedness can be incurred or issued
2 on terms desirable to the State.

3 This approval shall be in addition to any preliminary approval
4 given pursuant to subsection (a) of this section.

5 (e) In the absence of a determination by the Council of State,
6 the State Treasurer, after consultation with the Department of
7 Administration, shall determine whether the financing shall be
8 effected by alternative financing agreement indebtedness,
9 certificates of participation indebtedness, bonded indebtedness,
10 or some combination thereof.

11 (f) The State Treasurer, after consultation with the
12 Department of Administration, shall develop appropriate documents
13 for use under this Article, and the State Treasurer shall employ
14 and designate the financial consultants, underwriters, and bond
15 attorneys to be associated with the incurrence or issuance of
16 special indebtedness.

17 "§ 142-65. Security; other requirements.

18 (a) Special indebtedness shall create a security interest in
19 all or any part of the energy conservation projects financed by
20 such special indebtedness, and in the case of the modification,
21 rehabilitation, renovation, or improvement of existing
22 facilities, in all or some portion of such facilities, to secure:

23 (1) Lease or installment payments to be made to the
24 lessor, seller, or other individual or entity
25 advancing moneys or providing financing under an
26 alternative financing agreement; or

27 (2) Payment of the principal of and interest on bonded
28 indebtedness.

29 (b) Documentation relating to any special indebtedness may
30 include provisions requiring the Governor to submit in the
31 Governor's budget proposal or any amendments or supplements
32 thereto appropriations necessary to make the payments required by
33 any special indebtedness.

34 (c) Amounts payable by the State under an alternative
35 financing agreement or issue of bonded indebtedness during any
36 biennium or fiscal year, each being called a fiscal period for
37 purposes of this subsection, shall be limited to funds
38 appropriated for such fiscal period by the General Assembly in
39 its discretion. During any interim period after the adoption by
40 the General Assembly of appropriation legislation for a fiscal
41 period and prior to the adoption by the General Assembly of
42 appropriation legislation for the next fiscal period, an
43 alternative financing agreement or issue of bonded indebtedness,
44 the payment of which during such interim period has not been

1 provided for by appropriation legislation, may be incurred or
2 issued only if, in addition to compliance with the other
3 provisions of this Article, the Director of the Budget shall have
4 filed with the State Treasurer a certificate stating that
5 sufficient unencumbered money is available to make the required
6 payments during such interim period on such alternative financing
7 agreement or issue of bonded indebtedness. Such unencumbered
8 money shall become appropriated and reserved for making such
9 payments upon execution of the alternative financing agreement or
10 issuance of bonded indebtedness, subject to the right of the
11 General Assembly to modify or rescind such appropriations.

12 (d) No deficiency judgment shall be rendered against the State
13 in any action for breach of any obligation contained in an
14 alternative financing agreement or issue of bonded indebtedness,
15 and the taxing power of the State shall not be pledged directly
16 or indirectly to secure any moneys due under an alternative
17 financing agreement or issue of bonded indebtedness. In the
18 event that the General Assembly does not appropriate sums
19 sufficient to make payments required under an alternative
20 financing agreement or issue of bonded indebtedness, the net
21 proceeds received from the sale or other disposition of the
22 property subject to the lien or security interest shall be
23 applied to satisfy such payment obligations in accordance with
24 the deed of trust, security agreement, or other documentation
25 relating to such lien or security interest, and such net proceeds
26 are hereby deemed appropriated for the purpose of making such
27 payments. Any net proceeds in excess of the amount required to
28 satisfy the obligations of the State under an alternative
29 financing agreement or issue of bonded indebtedness shall be paid
30 to the State Treasurer for deposit to the General Fund.

31 (e) No alternative financing agreement or issue of bonded
32 indebtedness may contain a nonsubstitution clause that restricts
33 the right of the State to:

- 34 (1) Continue to provide a service or activity; or
35 (2) Replace or provide a substitute for any energy
36 conservation project financed or purchased thereby.

37 (f) An alternative financing agreement or issue of bonded
38 indebtedness may create a lien or security interest in any one or
39 more or all of the energy conservation projects being financed,
40 and the estimated value of the energy conservation projects
41 subject to the lien or security interest need not bear any
42 particular relationship to the principal amount of the agreement
43 or issue.

1 (g) Nothing in this Article shall limit the right of the
2 Council of State to grant multiple liens or security interests in
3 an energy conservation project to the extent not otherwise
4 limited by the terms of other special indebtedness.

5 (h) Special indebtedness may contain such provisions for
6 protecting and enforcing the rights and remedies of the lessor,
7 seller, or other individual or entity advancing moneys or
8 providing financing under an alternative financing agreement or
9 the owners of bonded indebtedness as may be reasonable and proper
10 and not in violation of law, including covenants setting forth
11 the duties of the State in respect of the purposes to which the
12 proceeds of special indebtedness may be applied, the disposition
13 and application of the revenues of the State, including taxes,
14 the duties of the State with respect to the capital facilities
15 financed, including, without limitation, the payment of the costs
16 of insurance and maintenance of the capital facilities, the
17 disposition of any charges and collection of any revenues and
18 administrative charges, the terms and conditions of the issuance
19 of additional special indebtedness, and the custody,
20 safeguarding, investment, and application of all moneys.

21 "§ 142-66. Alternative financing agreement indebtedness.

22 (a) The State Treasurer, after consultation with the
23 Department of Administration, shall approve all documentation
24 providing for the incurrence of alternative financing agreement
25 indebtedness.

26 (b) Any alternative financing agreement may provide for
27 payments thereunder to represent principal and interest
28 components of the cost of the energy conservation project to be
29 leased or acquired, such determination to be made by the State
30 Treasurer.

31 (c) Alternative financing agreements may be entered into
32 pursuant to any applicable public or competitive bidding process
33 or any private or negotiated process, to the extent required by
34 applicable law, and if not so required, as may be determined by
35 the Department of Administration after consulting with the State
36 Treasurer.

37 (d) All alternative financing agreements shall be executed on
38 behalf of the State by the Department of Administration after
39 having been approved by the State Treasurer.

40 (e) If the State Treasurer determines that it is in the best
41 interest of the State, the State Treasurer may arrange for the
42 delivery of a credit facility to secure payment under any
43 alternative financing agreement. The State Treasurer may also
44 provide that payments by the State representing the interest

1 component of the payments to be made under an alternative
2 financing agreement may be calculated based upon a variable
3 interest rate.

4 (f) All other conditions set forth elsewhere in this Article
5 with respect to alternative financing agreement indebtedness
6 shall also be satisfied prior to incurring any alternative
7 financing agreement indebtedness.

8 (g) To the extent applicable as may be conclusively determined
9 by the State Treasurer, the provisions of G.S. 142-69, 142-70,
10 and 142-71 shall apply to alternative financing agreement
11 indebtedness.

12 "§ 142-67. Additional requirements for certificates of
13 participation indebtedness.

14 (a) The State Treasurer, after consultation with the
15 Department of Administration, shall approve the use of an
16 alternative financing agreement in connection with the delivery
17 of certificates of participation by a special corporation.

18 (b) The documentation providing for the delivery and sale of
19 certificates of participation shall be approved by the State
20 Treasurer. The special corporation, if used, shall request the
21 approval of the State Treasurer in writing and shall furnish such
22 information and documentation relating to the delivery and sale
23 of the certificates of participation as the State Treasurer may
24 request. In determining whether such approval shall be granted,
25 the State Treasurer shall consider the factors provided for in
26 G.S. 142-64(d), as well as the effect of the proposed financing
27 upon any scheduled or proposed sale of debt obligations by the
28 State or any State agency or by any unit of local government in
29 the State.

30 (c) Upon the filing with the State Treasurer of a written
31 request of a special corporation to sell the certificates of
32 participation, the certificates of participation may be sold by
33 the State Treasurer in such manner, either at public or private
34 sale, and for such price or prices as the State Treasurer shall
35 determine to be in the best interest of the State and to effect
36 the purposes of this Article, provided that the sale shall be
37 approved by the special corporation. The certificates of
38 participation shall bear interest at such rate or rates as may be
39 determined by the State Treasurer with the approval of the
40 special corporation.

41 (d) Certificates of participation may be delivered pursuant to
42 a trust agreement with a corporate trustee approved by the State
43 Treasurer, and the provisions of G.S. 142-69(h) shall apply to
44 such trust agreement to the extent applicable.

1 (e) All other conditions set forth elsewhere in this Article
2 with respect to certificates of participation indebtedness,
3 including the conditions set forth in G.S. 142-66, shall also be
4 satisfied prior to incurring any certificates of participation
5 indebtedness.

6 "§ 142-68. Bonded indebtedness.

7 The State Treasurer may, by and with the consent of the Council
8 of State as provided in this Article, issue and sell at one time
9 or from time to time bonds of the State to be designated 'State
10 of North Carolina Limited Obligation Bonds, Series _____' or
11 notes of the State as provided in G.S. 142-69, for the purpose of
12 providing funds, with any other available funds, for the uses
13 authorized in this Article.

14 "§ 142-69. Issuance of bonds and notes.

15 (a) Terms and Conditions. -- Bonds or notes may bear the date
16 or dates, may be serial or term bonds or notes, or any
17 combination thereof, may mature in the amounts and at the time or
18 times, not exceeding 10 years from their date or dates, may be
19 payable at the place or places, either within or without the
20 United States of America, in the coin or currency of the United
21 States of America as at the time of payment is legal tender for
22 payment of public and private debts, may bear interest at the
23 rate or rates, which may vary from time to time, and may be made
24 redeemable before maturity, at the option of the State or
25 otherwise as may be provided by the State, at the price or
26 prices, including a price greater than the face amount of the
27 bonds or notes, and under the terms and conditions, all as may be
28 determined by the State Treasurer, by and with the consent of the
29 Council of State.

30 (b) Signatures; Form and Denomination; Registration. -- Bonds
31 or notes may be issued in certificated or uncertificated form.
32 If issued in certificated form, bonds or notes shall be signed on
33 behalf of the State by the Governor or shall bear the Governor's
34 facsimile signature, shall be signed by the State Treasurer or
35 shall bear the State Treasurer's facsimile signature, and shall
36 bear the Great Seal of the State or a facsimile of the Great Seal
37 shall be impressed or imprinted on the bonds or notes. If bonds
38 or notes bear the facsimile signatures of the Governor and the
39 State Treasurer, the bonds or notes shall also bear a manual
40 signature which may be that of a bond registrar, trustee, paying
41 agent, or designated assistant of the State Treasurer. Should
42 any officer whose signature or facsimile signature appears on
43 bonds or notes cease to be the officer before the delivery of the
44 bonds or notes, the signature or facsimile signature shall

1 nevertheless have the same validity for all purposes as if the
2 officer had remained in office until delivery of the bonds and
3 notes, and bonds or notes may bear the facsimile signatures of
4 persons who at the actual time of the execution of the bonds or
5 notes shall be the proper officers to sign any bond or note
6 although at the date of the bond or note those persons may not
7 have been the officers. The form and denomination of bonds or
8 notes, including the provisions with respect to registration of
9 the bonds or notes and any system for their registration, shall
10 be as the State Treasurer may determine in conformity with this
11 Article; provided, however, that nothing in this Article shall
12 prohibit the State Treasurer from proceeding, with respect to the
13 issuance and form of the bonds or notes, under the provisions of
14 Chapter 159E of the General Statutes, the Registered Public
15 Obligations Act, as well as under this Article.

16 (c) Manner of Sale; Expenses. -- Subject to the approval by
17 the Council of State as to the manner in which bonds or notes
18 shall be offered for sale, whether at public or private sale,
19 whether within or without the United States of America, and
20 whether by publishing notices in certain newspapers and financial
21 journals, mailing notices, inviting bids by correspondence,
22 negotiating contracts of purchase or otherwise, the State
23 Treasurer may sell bonds or notes at one time or from time to
24 time at such rate or rates of interest, which may vary from time
25 to time, and at the price or prices, including a price less than
26 the face amount of the bonds or notes, as the State Treasurer
27 determines. All expenses incurred in the preparation, sale, and
28 issuance of bonds or notes shall be paid by the State Treasurer
29 from the proceeds of bonds or notes or other available moneys.

30 (d) Application of Proceeds. -- The proceeds of any bonds or
31 notes shall be used solely for the purposes for which the bonds
32 or notes were issued and shall be disbursed in the manner and
33 under such restrictions, if any, as the Council of State may
34 provide in the resolution authorizing the issuance of, or in any
35 trust agreement securing, the bonds or notes.

36 Any additional moneys which may be received by means of a grant
37 or grants from the United States of America or any agency or
38 department thereof or from any other source to aid in financing
39 the cost of an energy conservation project may be disbursed, to
40 the extent permitted by the terms of such grant or grants,
41 without regard to any limitations imposed by this Article.

42 (e) Notes; Repayment. -- By and with the consent of the
43 Council of State, the State Treasurer may borrow money, and
44 execute and issue notes of the State for the borrowed money, but

1 only in the following circumstances and under the following
2 conditions:

- 3 (1) For anticipating the sale of bonds the issuance of
4 which the Council of State shall have approved, if
5 the State Treasurer shall deem it advisable to
6 postpone the issuance of the bonds;
7 (2) For the payment of interest on or any installment
8 of principal of any bonds then outstanding, if
9 there shall not be sufficient funds in the State
10 treasury with which to pay the interest or
11 installment or principal as they respectively
12 become due;
13 (3) For the renewal of any loan evidenced by notes
14 herein authorized;
15 (4) For the purposes authorized in this Article; and
16 (5) For refunding bonds or notes or alternative
17 financing agreement indebtedness as authorized by
18 this Article.

19 Funds derived from the sale of bonds or notes may be used in
20 the payment of any bond anticipation notes issued under this
21 Article. Funds provided by the General Assembly for the payment
22 of interest on or principal of bonds shall be used in paying the
23 interest on or principal of any notes and any renewals of any
24 notes, the proceeds of which shall have been used in paying
25 interest on or principal of the bonds.

26 (f) Refunding Bonds and Notes. -- By and with the consent of
27 the Council of State, the State Treasurer may issue and sell
28 refunding bonds and notes for the purpose of refunding bonds or
29 notes or alternative financing agreement indebtedness issued
30 pursuant to this Article. The refunding bonds and notes may be
31 combined with any other issues of State bonds and notes similarly
32 secured. Refunding bonds or notes may be issued at any time
33 prior to the final maturity of the debt or obligation to be
34 refunded. The proceeds from the sale of any refunding bonds or
35 notes shall be applied only as follows:

- 36 (1) To the immediate payment and retirement of the
37 obligations being refunded; or
38 (2) If not required for the immediate payment of the
39 obligations being refunded, the proceeds shall be
40 deposited in trust to provide for the payment and
41 retirement of the obligations being refunded and to
42 pay any expenses incurred in connection with the
43 refunding.

44 Money in any trust fund may be invested in:

- 1 (1) Direct obligations of the United States government;
2 (2) Obligations the principal of and interest on which
3 are guaranteed by the United States government;
4 (3) To the extent then permitted by law, in obligations
5 of any agency or instrumentality of the United
6 States government; or
7 (4) Certificates of deposit issued by a bank or trust
8 company located in the State, if such certificates
9 shall be secured by a pledge of any of said
10 obligations described in subdivision (1), (2), or
11 (3) of subsection (e) of this section having any
12 aggregate market value, exclusive of accrued
13 interest, equal at least to the principal amount of
14 the certificates so secured.

15 Nothing in this section shall be construed as a limitation on the
16 duration of any deposit in trust for the retirement of
17 obligations being refunded but which shall not have matured and
18 which shall not be presently redeemable, or if presently
19 redeemable, shall not have been called for redemption.

20 (g) Security. -- Payment of the principal of and the interest
21 on bonds and notes shall be secured as provided in G.S. 142-65.

22 (h) Trust Agreement. -- In the discretion of the State
23 Treasurer, any bonds and notes issued under the provisions of
24 this Article may be secured by a trust agreement by and between
25 the State and a corporate trustee or by a resolution of the
26 Council of State providing for the appointment of a corporate
27 trustee. The corporate trustee may be, in either case, any trust
28 company or bank having the powers of a trust company within or
29 without the State. A trust agreement or resolution may provide
30 for security, pledges, and assignments with respect to a trust
31 agreement or resolution as may be permitted under this Article
32 and further provide for the granting of a lien or security
33 interest in the collateral authorized by G.S. 142-65. The trust
34 agreement or resolution may contain those provisions for
35 protecting and enforcing the rights and remedies of the owners of
36 any bonds or notes issued thereunder as may be reasonable and
37 proper and not in violation of law, including covenants setting
38 forth the duties of the State in respect of the purposes to which
39 bond or note proceeds may be applied, the disposition and
40 application of the revenues or assets of the State, the duties of
41 the State with respect to the energy conservation projects
42 financed, the disposition of any charges and collection of any
43 revenues and administrative charges, the terms and conditions of
44 the issuance of additional bonds and notes, and the custody,

1 safeguarding, investment, and application of all moneys. All
2 bonds and notes issued under this Article shall be equally and
3 ratably secured as provided in such trust agreement or
4 resolution, without priority by reasons of number, or dates of
5 bonds or notes, execution, or delivery, in accordance with the
6 provisions of this Article and of such trust agreement or
7 resolution; provided, however, that such trust agreement or
8 resolution may provide that bonds or notes issued pursuant to
9 this Article shall, to the extent and in the manner prescribed in
10 such trust agreement or resolution, be subordinated and junior in
11 standing, with respect to the payment of principal and interest
12 and to the security of the bonds or notes, to any other bonds or
13 notes. It shall be lawful for any bank or trust company that may
14 act as depository of the proceeds of bonds or notes, revenues, or
15 any other money loaned under this Article to furnish any
16 indemnifying bonds or to pledge such securities as may be
17 required by the State Treasurer. Any trust agreement or
18 resolution may set out the rights and remedies of the owners of
19 any bonds or notes and of any trustee, and may restrict the
20 individual rights of action by the owners. In addition, any
21 trust agreement or resolution may contain any other provisions as
22 the State Treasurer may deem reasonable and proper for the
23 security of the owners of any bonds or notes. Expenses incurred
24 in carrying out the provisions of any trust agreement or
25 resolution may be treated as a part of the cost of any energy
26 conservation project or as an administrative charge and may be
27 paid from the proceeds of the bonds or notes or from any other
28 available funds.

29 "§ 142-70. Variable rate demand bonds and notes.

30 (a) In fixing the details of bonds and notes, the State
31 Treasurer may provide that these bonds and notes may:

32 (1) Be made payable from time to time on demand or
33 tender for purchase by the owner of the bonds or
34 notes provided a credit facility supports the bonds
35 or notes, unless the State Treasurer specifically
36 determines that a credit facility is not required
37 upon a finding and determination by the State
38 Treasurer that the absence of a credit facility
39 will not materially and adversely affect the
40 financial position of the State and the marketing
41 of the bonds or notes at a reasonable interest cost
42 to the State;

43 (2) Be additionally supported by a credit facility;

- 1 (3) Be made subject to redemption or a mandatory tender
2 for purchase prior to maturity;
3 (4) Bear interest at a rate or rates that may vary from
4 such period or periods of time, all as may be
5 provided in the proceedings providing for the
6 issuance of the bonds or notes, including, but not
7 limited to, such variations as may be permitted
8 pursuant to a par formula; and
9 (5) Be made the subject of a remarketing agreement
10 whereby an attempt is made to remarket bonds or
11 notes to new purchasers prior to their presentment
12 for payment to the provider of the credit facility
13 or to the State.

14 (b) If the aggregate principal amount payable by the State
15 under a credit facility is in excess of the aggregate principal
16 amount of bonds or notes secured by the credit facility, whether
17 as a result of the inclusion in the credit facility of a
18 provision for the payment of interest for a limited period of
19 time or the payment of a redemption premium or for any other
20 reason, then the amount of authorized but unissued bonds or notes
21 during the term of such credit facility shall not be less than
22 the amount of such excess, unless the payment of such excess is
23 otherwise provided for by agreement of the State executed by the
24 State Treasurer.

25 "§ 142-71. Other agreements.

26 The State Treasurer may authorize, execute, obtain, or
27 otherwise provide for bond insurance, investment contracts,
28 credit and liquidity facilities, interest rate swap agreements
29 and other derivative products, and any other related instruments
30 and matters as the State Treasurer shall determine desirable in
31 connection with the incurrence or issuance of special
32 indebtedness.

33 "§ 142-72. Tax exemption.

34 Bonds and notes and alternative financing agreement
35 indebtedness shall be exempt from all State, county, and
36 municipal taxation or assessment, direct or indirect, general or
37 special, whether imposed for the purpose of general revenue or
38 otherwise, excluding inheritance and gift taxes and income
39 taxation on gain from the transfer thereof. The interest on
40 bonds and notes and the interest component of payments made under
41 alternative financing agreements, including the interest
42 component of certificates of participation, shall not be subject
43 to taxation as to income.

44 "§ 142-73. Investment eligibility.

1 Bonds and notes and alternative financing agreement
2 indebtedness are hereby made securities or obligations in which
3 all public officers, agencies, and public bodies of the State and
4 its political subdivisions, all insurance companies, trust
5 companies, investment companies, banks, savings banks, savings
6 and loan associations, credit unions, pension or retirement
7 funds, other financial institutions engaged in business in the
8 State, executors, administrators, trustees, and other fiduciaries
9 may properly and legally invest funds, including capital in their
10 control or belonging to them. Bonds and notes and alternative
11 financing agreement indebtedness are hereby made securities or
12 obligations that may properly and legally be deposited with and
13 received by any officer or agency of the State or political
14 subdivision of the State for any purpose for which the deposit of
15 bonds, notes, or obligations of the State or any political
16 subdivision is now or may hereafter be authorized by law.

17 "§ 142-74. Procurement of energy conservation projects.

18 The provisions of Articles 3, 3B, 3C, 3D, and 8 of Chapter 143
19 of the General Statutes and any other laws or rules of the State
20 that relate to the acquisition and construction of State property
21 shall apply to the financing of energy conservation projects
22 through the use of special indebtedness."

23 Sec. 4. Interpretation of act. (a) Additional method.
24 The foregoing sections of this act shall be deemed to provide an
25 additional and alternative method for the doing of the things
26 authorized thereby and shall be regarded as supplemental and
27 additional to powers conferred by other laws, and shall not be
28 regarded as in derogation of any powers now existing.

29 (b) Liberal construction. This act, being necessary
30 for the health and welfare of the people of the State, shall be
31 liberally construed to effect the purposes thereof.

32 (c) Inconsistent provisions. Insofar as the provisions
33 of this act are inconsistent with the provisions of any general
34 laws, or parts thereof, the provisions of this act shall be
35 controlling.

36 (d) Severability. If any provision of this act or the
37 application thereof to any person or circumstance is held
38 invalid, such invalidity shall not affect other provisions or
39 applications of the act which can be given effect without the
40 invalid provision or application, and to this end the provisions
41 of this act are declared to be severable.

42 Sec. 5. The one million one hundred nineteen thousand
43 six hundred fifty-two dollars (\$1,119,652) that was received from
44 the United States Department of Energy's Stripper Well Litigation

1 (MDL378), appropriated from the Special Reserve for Oil
2 Overcharge Funds to the Department of Commerce for the 1992-93
3 fiscal year, and allocated for energy conservation programs for
4 hospitals and schools shall be reallocated to the Department of
5 Commerce for the 1995-96 fiscal year for energy conservation
6 programs for hospitals and schools and for energy conservation
7 projects for State facilities pursuant to Part 3 of Article 3B of
8 Chapter 143 of the General Statutes, as enacted by Section 2 of
9 this act.

10 Sec. 6. This act becomes effective July 1, 1995.

SECTION-BY-SECTION ANALYSIS OF LEGISLATIVE PROPOSAL IV

Section 1: Section 1 authorizes the Department of Administration to finance an energy conservation measure through installment financing pursuant to Article 8 of Chapter 142 of the General Statutes as enacted in Section 3 of this act.

Section 2: Section 2 enacts Part 3 of Article 3B of Chapter 143 of the General Statutes, thereby establishing the "State Facilities Energy Conservation Program" to be developed, administered, and coordinated by the Energy Division. The Energy Division has the responsibility of providing criteria for the selection of State facilities to participate in the program. After an approved technical analysis has been conducted to identify potential energy conservation measures, the Energy Division shall select, with the assistance of the Department of Administration, the State facilities to participate. Only projects that, according to the technical analysis, will have a pay back of no more than six years may be considered for final selection, with those having no more than a two year pay back having priority. The Energy Division is required to notify the Joint Legislation Commission on Governmental Operations of any project having a construction cost greater than \$5,000 before executing the financing documents.

Section 3: Section 3 enacts Article 8 of Chapter 142 of the General Statutes entitled the "Energy Conservation Projects Finance Act." This new article establishes a procedure and the terms for incurring or securing special indebtedness through alternative financing agreements (defined as installment-purchase agreements, lease-purchase agreements, or other similar installment-financing agreements and certificates of participation) or through bonded indebtedness.

Special indebtedness creates a security interest in all or part of the energy conservation project financed by the special indebtedness. An energy conservation project is defined to include any modification, rehabilitation, renovation, or improvement of existing State facilities or any acquisition and installation of fixtures or equipment in existing State facilities that is intended to reduce energy costs or consumption or allow the use of an alternative energy source. The use of special indebtedness to finance an energy conservation project must be approved by the State Treasurer after consulting with the Office of State Budget and Management. The use of special indebtedness to finance an energy conservation project also must be approved by the Council of State, which may specify terms, conditions, and restrictions as it deems necessary or desirable. The total amount of special indebtedness pursuant to the agreements may not exceed \$30,000,000 at any one time. No deficiency judgement may be rendered against the State, and the taxing power of the State shall not be pledged directly or indirectly to secure any moneys due under an alternative financing agreement or issue of bonded indebtedness.

Section 4: Section 4 provides guidance to the interpretation and construction of the act.

Section 5: Section 5 provides that the \$1,119,652 that was received by the Department of Commerce from the U. S. Department of Energy from the Stripper Well Litigation is allocated for the 1995-96 fiscal year for energy conservation programs for hospitals and schools as well as projects undertaken pursuant to the State Facilities Energy Conservation Program as enacted by this act.

Section 6: This act becomes effective July 1, 1995.



GENERAL ASSEMBLY OF NORTH CAROLINA

SESSION 1995

H

D

HOUSE JOINT RESOLUTION 95-LD-009A(1.1)
(THIS IS A DRAFT AND NOT READY FOR INTRODUCTION)

Sponsors: Energy Conservation Committee.

Referred to:

1 A JOINT RESOLUTION AUTHORIZING THE LEGISLATIVE RESEARCH
2 COMMISSION TO CONTINUE TO STUDY WAYS TO PROMOTE ENERGY
3 CONSERVATION AND THE USE OF RENEWABLE ENERGY SOURCES IN NORTH
4 CAROLINA.

5 Whereas, the Legislative Research Commission was
6 authorized in 1991 to study Ways to Promote the Conservation of
7 Energy and the Use of Renewable Energy Sources in Residential,
8 Commercial, Industrial, and Public Facilities; and

9 Whereas, this study committee proved to be an excellent
10 forum for different State agencies that have a role in promoting
11 energy conservation; architects and engineers; industry; and
12 environmental groups to present their respective opinions for
13 needed changes and improvements in promoting energy conservation
14 in buildings; and

15 Whereas, this study committee found that energy
16 conservation can save the State and its citizens substantial sums
17 of money by reducing energy costs and at the same time protect
18 the environment; and

19 Whereas, the Legislative Research Commission was
20 authorized in 1993 to continue its study of Energy Conservation
21 and Use of Renewable Energy Sources; and

22 Whereas, this study committee continued to look into
23 energy conservation projects in public buildings that would save
24 substantial sums of money in avoided utility bills; and

1 Whereas, this study committee also studied alternative
2 transportation fuels and found that the use of these fuels would
3 reduce our dependence on foreign oil as well as serve to reduce
4 toxic air emissions, thereby protecting air quality; and

5 Whereas, even after four years, there is much work
6 remaining for the study committee to do; and

7 Whereas, energy conservation remains a largely untapped
8 method of saving money and protecting our natural resources;

9 Now, therefore, be it resolved by the House of Representatives,
10 the Senate concurring:

11 Section 1. The Legislative Research Commission is
12 authorized to study ways to promote energy conservation and the
13 use of renewable sources of energy in North Carolina. The study
14 committee may address all issues that bear on energy conservation
15 in this State. In the course of its work, the study committee
16 shall:

17 (1) Monitor the conversion of State motor vehicle
18 fleets to alternative fueled vehicles, as required
19 by the federal Energy Policy Act of 1992; 42 U.S.C.
20 § 13201, et seq.

21 (2) Monitor other federal legislation related to
22 alternative fuels.

23 (3) Receive and review reports from and advise the
24 working group established by the Department of
25 Administration, the Department of Commerce, the
26 Department of Transportation, and the Office of the
27 Governor to plan for the State to meet its
28 alternative fueled vehicles purchasing requirements
29 under the Energy Policy Act of 1992.

30 (4) Conduct public hearings in the State regarding the
31 use of alternative transportation fuels.

32 (5) Serve as a focal point for discussion and proposals
33 leading to the development of North Carolina's
34 public policy on the use of alternative fuels for
35 vehicles and energy conservation in general.

36 Sec. 2. The study committee may submit an interim
37 report to the 1996 Regular Session of the 1995 General Assembly.
38 The study committee shall submit a final report of its
39 recommendations and legislative proposals to the 1997 General
40 Assembly.

41 Sec. 3. This resolution is effective upon ratification.

